INDRADHANUSH GAS GRID LIMITED

NORTH EAST GAS GRID PHASE-III OF IGGL

BID DOCUMENT
FOR
LAYING & CONSTRUCTION OF STEEL GAS PIPELINE & TERMINALS ALONG WITH ASSOCIATED FACILITIES FOR SECTION-11 UNDER NORTH EAST GAS GRID PHASE-III OF IGGL.

OPEN DOMESTIC COMPETITIVE BIDDING (ODCB)

TENDER ID: VCS21000032

Tender No.: C221052-VCS-IGGL-TENDER-007

(VOLUME IV OF IV)

ENERGISING QUALITY

PREPARED AND ISSUED BY
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Noida, India

Energising Quality	**PROJECT NUMBER: C221052**	IGGL

LIST OF ATTACHEMENTS				**TOTAL SHEETS**	7
DOCUMENT NO	C221052	00	PP	LST	2004A

LIST OF ATTACHMENTS-
SURVEY DATA FOR PIPELINE & PIPING-
(VOLUME IV OF IV)

C1	17-12-2022	ISSUED FOR BIDS	SR	MC	HK
REV	**DATE**	**DESCRIPTION**	**PREP**	**CHK**	**APPR**

1.0 LIST OF ATTACHMENTS

CONTRACTOR shall carry out all works strictly in accordance with the drawings/documents/specifications indicated in subsequent paragraphs.

Sr. No	Documents Number	Description	Remarks
SURVEY DATA			
1	-	SOIL STRATIFICATION REPORT SGPL	
2	-	SURVEY REPORT-SGPL	
3	-	SOIL RESITIVITY REPORT-SGPL	
4	-	SOIL CHEMICAL ANALYSIS REPORT-SGPL	
5	-	CROSSING DRAWINGS	

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VOLUME IV OF IV

SURVEY REPORT -SILIGURI PIPELINE SECTION (APPLICABLE FOR ALL SPREAD, ALL PARTS)

DETAILED ENGINEERING ROUTE SURVEY WORKS FOR PROPOSED NORTH EAST GAS GRID PIPELINE PROJECT – PHASE - III

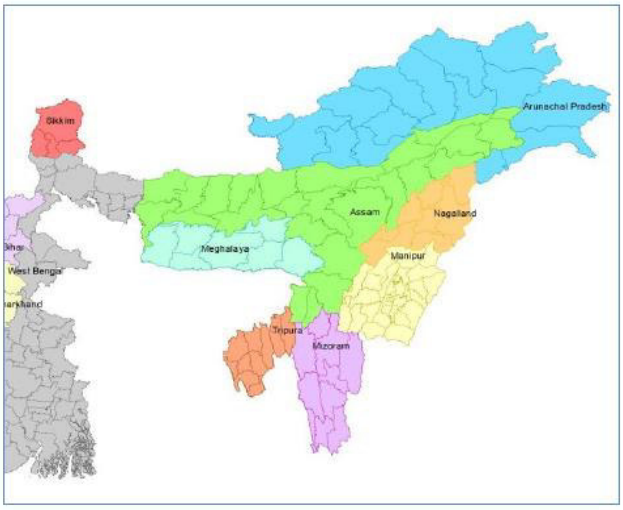
GROUP – D

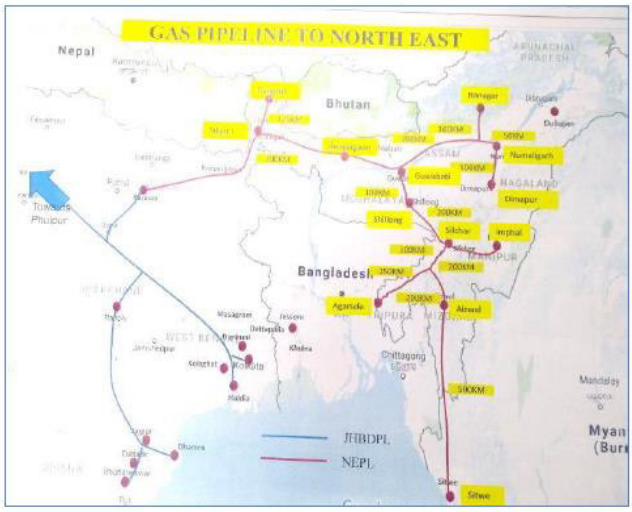
SILIGURI - GANGTOK (NEW) NATURAL GAS PIPELINE

DETAILED ENGINEERING SURVEY

DRAFT REPORT - V1

DRAFT





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DETAIL ROUTE SURVEY REPORT FOR NORTH EASTERN GAS GRID – SILIGURI TO GANGTOK - NEW PIPELINE

1. INTRODUCTION AND SCOPE OF WORK

1.1. Introduction

Natural Gas has become a key resource for global energy needs and is an abundant, versatile and clean burning fuel. It is a naturally occurring hydrocarbon gas mixture consisting primarily of methane and is a fossil fuel used as a source of energy for heating, cooking, electricity generation, fuel for vehicles, raw material in petro-chemical industries, etc. Natural Gas satisfies most of the requirements for fuel in a modern day industrial society - being efficient, non-polluting and relatively economical. The periodic uncertainties and volatility in both the price and supply of oil have also helped Natural Gas emerge as a major fuel in the energy basket across countries.

Natural gas has been playing a vital role in all aspects of development and is poised to occupy a significant share in the energy mix. The Natural Gas is widely transported in the gaseous state through gas pipelines or by means of Natural Gas carriers in the liquid state (LNG). Gas pipelines allow the transportation of large quantity of natural gas directly from place of production to the place of consumption without any loading or storing operation. Piped Natural Gas is safer as compared to LPG due to its light weight nature and in the event of leakage; it dissipates immediately in the air. However, as Natural Gas is combustible, flammable and explosive, handling of this fuel require utmost care with highly efficient transportation system and least loss during transit. Therefore, transportation of gas through pipeline is a safe, economic and environmentally sound alternative to most other modes of energy transport. For selecting the pipeline route, the main challenge is to select the most optimum route in terms of distance, environment and economic interests keeping safety in mind.

With a vision to develop North East region as a dominant hydrocarbon hub at the forefront of India's energy economy – "Hydrocarbon Vision 2013 of North East India", has been developed by the Ministry of Petroleum and Natural Gas. One of the objectives of the vision is the development of natural gas grid and CNG highways that will interconnect the States in the North East region as well as with natural gas grid. Towards this, Indradhanush Gas Grid Limited (IGGL), is now planning to lay natural gas pipelines in the North Eastern States and had called for tender vide Tender Notification No. PLCC/NEGPL/CL/18022. The work envisaged under this contract included conducting Reconnaissance survey, Detailed Engineering survey, Soil surveys & Population Density Index surveys for the proposed Natural Gas Pipelines in North-East India. The pipeline segments have been divided into 4 groups i.e., Group-A, Group-B, Group-C and Group-D. Indian Resources Information & Management Technologies Ltd., (IN-RIMT), Hyderabad had participated in the tender process and is entrusted the task of carrying out the studies and investigations of Group-D consisting of:

1. Dimapur – Imphal Section
2. Siliguri - Gangtok Section.

This report pertains to the Desk top study, Reconnaissance survey and Detailed Engineering Survey carried out at the site to study / identify options for laying the pipeline along the above mentioned routes. This report is for Siliguri to Gangtok Pipeline.

The take-off point of the Siliguri-Gangtok section is proposed from the existing Barauni – Guwahati gas pipeline of GAIL (India) Ltd., which runs in an east-west direction towards the south of Siliguri-Jalpaiguri cities in West Bengal. The SV-13 is taken as starting point for this Pipeline Route. This pipeline is proposed to be terminated near Ranipool in Gangtok, Sikkim State.

The Siliguri – Gangtok pipeline would cater to the demands along the route especially the cities of Siliguri, Jalpaiguri and Gangtok. The take-off is from the SV-13 station on the Belakoba Road near Belacoba village. The line passes

through agriculture fields, tea plantations and river area before crossing NH-31 and takes the national highway NH-717A all along till it reaches the terminal point near Saramsa Garden at Ranipool.

Most of the line runs near to Teesta River from Belacoba to Bagrakote. The road is quite good from Bagrakote up to Gangtok. The width of the road is 6-8 m up to the Sikkim border with no much space between the blacktop portion and the drain. From there onwards, all along, up to Ranipool the road is wide (8-10 m) with berm at most places. Along the alignment, the proposed pipeline crosses 3 Railway lines, 119 National Highways, 11 Major / Minor rivers and 10 stream / nala / canal crossings. It passes through the RoW of the NH which is within Forest limits for a length of 136.084 km both in West Bengal and Sikkim State whereas the length of 49.534 Km is in plain areas in West Bengal state. The total length of pipeline runs in West Bengal is about 142.636 Km and in Sikkim is about 42.982 Km.

Pipeline transportation of gas offers a safe, economic and environmentally sound alternative to most other modes of energy transport.

The main challenge is to select most optimum route in terms of distance, environment and economic interests and construction of the pipeline keeping its safety in mind.

Further, the scope of the work is divided into the following parts:

- Reconnaissance Survey
- Detailed Engineering Survey
- Population Density Index Survey
- Soil Resistivity Survey
- Soil Chemical Analysis Survey
- Soil Stratification Survey
- Data Generation

The present report embodies the information on the Detailed Engineering Survey conducted along the Route proposed from Siliguri to Gangtok.

I. Reconnaissance Survey

Reconnaissance survey has been conducted and IN-RIMT suggested three suitable options for which the take-off point of the Siliguri-Gangtok section is proposed from the existing Barauni – Guwahati gas pipeline of GAIL (India) Ltd., which runs in an east-west direction towards the south of Siliguri-Jalpaiguri cities in West Bengal. This pipeline is proposed to be terminated near Ranipool in Gangtok, Sikkim State.

The three route options proposed in the original Reccee Survey are –

The total lengths of Option-1, Option-2 & Option-3 are 115 km, 180 km & 182 km, respectively. Major curves/ hair-pin bends along Option-1, Option-2 & Option-3 are 8, 124 & 133, respectively. The minimum & maximum elevation along Option-1 is 101 m & 900 m; along Option-2, it is 101 m & 2226 m and along Option-3, it is 98m & 2226 m.

Because of the above considerations, the following are the preferences:

1st Preference is Option-1. This alignment has the shortest distance of about 115 km (about 65 km less than Option-2 and 67 km less than Option-3), gradual gradient, less number of sharp curves and road crossings. Narrow road and heavy traffic is the major hurdle.

The Option-1 has the issues with the permissions from the NH authorities as the Road is having heavy traffic and not possible to divert the traffic as Gangtok is a Tourism hub. So the Option-2 was considered as an alternative for the survey. There is also a possibility of the Expansion of the Road in future as an alternative route to Gangtok. This route has the partial length going through the cross country and the remaining is going through the high way roads.

II. Detailed Route Survey:

Thus, the present report covers the study of route on detail engineering survey for the Siliguri to Gangtok Pipeline. On the basis of the desktop study as well as field survey, Option 2 has been selected by IGGL to conduct the Detailed Engineering Survey based on various factors, merits and demerits and finally the route approved by IGGL was taken up for detail engineering survey and thus the present report.

1.2. Scope of work

The scope of work for this work as specified by IGGL in the tender documents in brief is as under;

The take-off point of the Siliguri-Gangtok section is proposed from the existing Barauni – Guwahati gas pipeline of GAIL (India) Ltd., at SV-13 which is on the side of Belacoba Road near Belacoba Village. This route runs in a North – South direction from the take-off point which is towards the South East of Siliguri city in West Bengal. This pipeline is proposed to be terminated near Ranipool in Gangtok, Sikkim State.

The Siliguri – Gangtok pipeline would cater to the demands along the route especially the cities of Siliguri - Jalpaiguri and Gangtok. The take-off is from the SV-13 of GAIL pipeline near Belacoba village and passes through agriculture fields, tea plantations and River area before crossing NH-31. The alignment then goes through the NH-717A from Bagrakote.

After crossing the Railway track near Bagrakote, it goes along the NH-717A (Siliguri-Gangtok road) till Saramsa Garden, Ranipool in Gangtok.

The owner wants to lay the new pipeline in this route and for this new RoU is to be acquired. Hence, a fresh detail survey is carried out.

The approved techno-commercial feasible route has been taken up for detail engineering survey. Detailed Engineering survey has to be taken up all along the existing route and drawings are to be prepared accordingly.

A population density index survey has also been conducted for the entire section and the details of habitations; public places etc. have been collected as per the technical specification.

All along the route alignment, auger boring has been conducted and details of stratification have been collected along with the soil resistivity survey at specified intervals.

A route map, crossing drawings and alignment sheets are prepared using the surveyed data as per the specified scale, dimensions etc. which are specified in the technical specification.

A detail survey report is prepared and submitted to the client for approval.

In the end a GIS module is prepared and submitted as per the IGGL GIS standards using the survey data / records / drawings.

A check list as per tender documents is filled up with required information as under;

CHECK LIST :

Sr. No.	Activities	Status / Remarks
1	Re-confirmation and Fixing of start and end locations of survey.	IGGL wants to lay the Siliguri to Gangtok Natural Gas Pipeline from the take-off is from the SV-13 of GAIL pipeline near Belacoba village. The end point is near Saramsa Garden, Ranipool in Gangtok.
2	Transfer of nearby benchmarks (with reference to MSL). Fixing of Co-ordinates of start/ end locations.	We have carried all the existing Bench Marks from the corridor and at some places established bench marks with the help of DGPS. A statement of list of bench mark is annexed with this report.
3	Check for calibration / accuracy/ performance of Total station & other instruments used for Survey. Indicate details of instruments used.	Total Station instruments, Leica - Model - TS06 Plus 1", Serial No. 1389363, Topcon - Model - GTS 233N 3", Serial No. X10099, Gowin - Model - TKS202 2", Serial No. 8E6484, Leica - Model - TS06 Plus 1", Serial No. 1389363 make, DGPS - Leica, Model - GX1220, Serial No.470505 & Model GSX-2 of SOKKIA and pipeline locator DIGICAT 200 of Leica are deployed for the survey work. The instruments are duly calibrated.
4	Check for the Surveyor experience and their operating skills of survey instruments.	We have deployed sufficient numbers of graduate / diploma civil engineers, I.T.I. surveyors having ample experience of carrying out the route survey with the latest electronic survey instruments.
5	Certification for route not passing through CRZ/ National Park/ Sanctuary / Coral Reef/ Ecologically sensitive areas including LNG terminals.	The route alignment does not pass through the CRZ / National Park / Sanctuary / Coral Reef / Ecologically sensitive areas including LNG terminals.
6	Certification for route not passing through Critically	The route alignment does not pass through Critically Polluted areas as per MoEF Notification

Sr. No.	Activities	Status / Remarks
	Polluted areas as per MoEF Notification dated 15.03.2012.	dated 15.03.2012.
7	Check to avoid major obstacles / dense plantation / permanent structures/ very hilly terrain etc.	The route alignment avoids major obstacles / dense plantation / permanent structures / very hilly terrain etc. to the maximum extent.
8	Major Highlights of the Pipeline route.	
a	Major Highlights of the Pipeline route.	The route alignment of Siliguri to Gangtok Natural Gas Pipeline from take-off is from the SV-13 of GAIL pipeline near Belacoba village. The end point is near Sarmsa Garden, Ranipool in Gangtok. It caters the CGD requirements for Siliguri and Gangtok cities.
b	Co-ordinates of Starting Point.	Longitude Latitude 88° 34' 41.827" E 26° 34' 52.785" N
c	Co-ordinates of Terminating Point.	Longitude Latitude 88° 35' 46.018" E 27° 16' 35.583" N
d	Total Chainage	185.618 km
e	Total IP points.	---
f	Total TP Points.	3690
g	Major Crossings Rly/ NH /SH /MDR/River/ Canal/ Forest.	Railway Crossings – 3 Nos., NH Crossings – 119 No., SH Crossing- 0 Nos., Major District roads – 0 Nos., Other Roads – 142 Nos., River Crossing- 11 Nos., Canal Crossings – 3 Nos. Nala & Drains – 7 Nos. and Tower lines – 2 Nos.

2. ROUTE DESCRIPTION

Indradhanush Gas Grid Limited (IGGL) is developing a natural gas terminals at Siliguri in West Bengal and Ranipool in Sikkim for catering the needs of CGD requirements for Siliguri and Gangtok Cities. The regasified- liquefied natural gas is to be transported to various consumers in Siliguri and Gangtok cities by developing North Eastern Gas Grid pipelines infrastructure in the states of West Bengal and Sikkim to cater to the needs in those areas.

Hence, a detailed engineering survey from Siliguri to Gangtok pipeline is carried out and presented in this report. The description of the route alignment is as under;

2.1. Climate and Rainfall:

The climate of Siliguri, West Bengal is characterized by monsoon type with wet & warm summer and dry & cold winter.

The Natural Gas pipeline proposed between Siliguri and Gangtok passes through the northern parts of West Bengal and southern parts of Sikkim States. As such, most of the above mentioned areas are of high altitude and mountainous parts of the two states.

The State of West Bengal in particular, experiences a tropical type of climate. The physiography of the State is varying as it touches the Himalayan range in the North and is bordered by the Bay of Bengal in the South. The seasons in West Bengal can be categorized as summer, winter, spring, autumn and rainy season. Summer season is from March to June months and during this season the highest day temperature ranges from 30°C to 45°C and the average temperature is around 30°C. Rainy season is from July to end of September. Heavy rainfall of above 250 cm is observed in Darjeeling, Jalpaiguri, Alipurduar & Cooch Bahar district during this season. Autumn is from beginning of October to middle of November and Winter from mid-November to February. January is the coldest month. Winter is cold over the plains with average minimum temperature of 9°C to 16°C. The districts of Darjeeling and Jalpaiguri

experiences a cool temperate type of climate with an average summer temperature of about 15°C and a winter temperature of about 2°C. Annual rainfall differs in different parts of the State. While the northern districts of Bengal receive the highest rainfall of 200-400 cm, the coastal region receives about 200 cm of rainfall. The Ganga plains and the central part of the State receives a rainfall of about 150-200 cm and in the western plateau region the amount of rainfall received is 100-125 cm. Drought is common in Bankura and Purulia districts.

The climate of Sikkim state may be divided into Tropical, Temperate and Alpine types. For most of the year, the climate is cold and humid as rainfall occurs in all the months. Rainfall in the northern part of the State is comparatively less when compared to other parts. Pre-monsoon rains occur in April-May and monsoon season is normally from the month of May up to October. The mean annual rainfall is minimum at Thongu (82 mm) and maximum at Gangtok (3494 mm). The number of rainy days (days with rain of 2.5 mm or more) ranges from 100 at Thongu in north Sikkim to 184 at Gangtok in east Sikkim. Rainfall is heavy and well distributed during the months of May to early October and July is the wettest month in most places. Temperature seldom exceeds 28°C in summer and the average annual temperature of the State is around 18°C. The State has 5 seasons i.e., summer, winter, spring, autum and monsoon. Sikkim records regular snowfall and the snow line ranges from 1600 m in the south to 4900 m in the north of the State. The Tundra type region in the North is snowbound for 4 months of the year. In north western Sikkim, the peaks are frozen year round because of high altitude and the temperature in this region drop to less than -40°C in winter.

2.2. Geology

The Sikkim-Darjeeling region, Bhutan and Arunachal Pradesh areas of the North East part of India is categorized as the Eastern Himalaya. Physiographically and geologically, Sikkim State and the northern portion of Darjeeling district of West Bengal is almost similar with homogeneity and

continuity. The Darjeeling district of West Bengal is therefore divided into 2 parts ie., (i) the Darjeeling Himalayas in the North, and (ii) the plains of the adjacent Southern terrain.

Sikkim - Darjeeling Himalayas is mostly covered by Precambriam metapelites with low to medium grade metamorphism and Buxa-carbonate-quartzite association (Daling Group), high grade Gneisses (Darjeeeling Group) and deformed Granitic Gneisses. The Paleozoic – mesozoic rocks include Gondwana equivalent and Tethyan rocks (pelites & limestones). The rock formation of the region has been complicated by tectonic activities. The foothills constitute a linear strip of faulted tertiary sandstones which are overridden on a thrust plain in an inverted sequence by Gondwana shales and sandstones, Buxa dolomites and quartzites, Daling shales, phyllites and schists. The southern range of lesser Himalayas constitutes Buxa series and Daling series with metamorphic varients such as Darjeeling gneisses. The northern rocks are mostly gneisses and granites, sedimentary rocks such as shales and permo-carboniferous sandstones containing coal seams.

Jalpaiguri district in the northern portion of West Bengal consists of pebble/ boulder beds, quartzites, sandstones, slates, carbonaceous slates and coal seams. The rocks have undergone intense deformation especially in the proximity of the Main Boundary Thrust (MBT) fault. A belt of alluvial detritus of Tertiary age occurs in the Terai region of the northern part of Jalpaiguri district. These belong to the Siwalik Group of rocks consisting of course, hard sandstone, siltstone, slate and conglomerate. These rocks follow the fringes along the foothills and have a trust contact with the rocks of Gondwana super group towards the north. The Quarternary formation in the northern part of West Bengal occurs just south of the Siwalik Group represented by boulders, gravels, pebbles, sand and silt in the higher reaches and by fluvial terraces and fluvial plains (sand, silt, clay) in the lower reaches.

2.3. General Soil profile along the proposed pipeline

The soils of Darjeeling Hill area have developed depending upon the underlying geological structure. But, in general the soils have been developed by both fluvial action and lithological disintegration. The soils that have developed in the Kalimpong area are predominantly reddish in color. Occasional dark soils are found due to extensive existence of phyllitic and schists. Soils in the highlands stretching from the west to the east of the district along most of the interfluvial areas are mainly mixed sandy loam and loamy, while those on the southern slopes of Mirik and Kurseong are mainly clayey loam and reddish in color. Sandy soils are mainly found in the east of the river Tista.

All the soils are definitely acidic in nature with the tendency to increase slightly in depth in most cases indicating the lacking of bases from surface and accumulation in the lower horizons. The weathering of lateritic type is the substantial mechanism in the transformation of the substratum. The variable thickness of the regolith and soils depend on the rate of weathering and gradient of the longitudinal slope profiles and intensity / gravity of mass movements. The basic soil types are yellow soils, red brown soils and brown forest soils. Red and yellow soils have developed on gneiss while brown on schists and shales. Coarse pale yellow to red brown soils are found on the Siwaliks while clayey dark soils are developed on Daling series.

The character of the bedrock is reflected only in the grain size composition of the soil. On the Darjeeling gneiss, very coarse-grained (50% -80%) particles are found. In Damuda and Daling series percentage of sandy and coarse particles in the soils are high. On the Siwaliks, silty – clay fraction is higher. The chemical content of the soil over Darjeeling gneiss is characterized by a high proportion of potassium derived from feldspar and muscovite mica. This soil is poor in lime, magnesium, iron oxides, phosphorous and nitrogen. Therefore lime is used in the tea plantation areas.

2.4. Land use of the corridor

The land use practices play the most important role in determining the stability factors in respect of landslide hazards. The land use map of Darjeeling Hill Areas explains that there are agricultural activities, tea and medicinal plant plantations, construction works along with forests, rivers, jhoras etc.

The main problem in respect of land use in the Darjeeling Hill Areas is related to high density of population. There is very limited scope for extension of agricultural land to cope up with increasing pressure of population. As a result pressure on forested and other restricted areas is gradually increasing.

Another problem related to land use and consequent landslide is that in Darjeeling Hill Areas, roads have never been examined with its carrying capacity respect with geology etc. Along with new road construction the vehicular movements have increased to a great extent with the rapid growth of trade and commerce. Heavy traffic movements along with heavy rainfall are responsible for most of the landslide occurrences especially on the roads. In recent years, it has been observed that there is a constant increase in the vehicular traffic, especially heavy vehicles like trucks and buses.

The principal economy of Darjeeling Hill Area depends on tea production, horticulture, agriculture and forestry. The major portions of the forests are today found at elevations of 2000 mts and above. The area located in between 1000-2000mts is cleared either for tea plantation or cultivation.

Prior to 1863 very little attention was paid to the conservation and afforestation programmes. Darjeeling district had 11,000 hectare of Reserve Forest up to 1879. But, after independence due to rapid urbanization, the upper belt of the forest was taken for commercial use. Much of the natural forests in the Senchal, Ghum-Simana and Takdah ranges have been converted. Some patches of natural forests are still found in Reshop, Bara Senchal, Lopchu, Rongbong and Durbin Gram Panchayats. On the difficult terrains, still a few natural forest patches are found.

The Socio- Economic development of any area in terms of infrastructure and industries depends safeguarding the environment has attained utmost importance in the recent past. With the aid of Remote Sensing and GIS, spatial data sets have been developed to understand and study the possible occurrence of Ecologically Sensitive Areas and the other current land use classes. The ecologically sensitive areas have been avoided to the best possible extent. The CRZ regulations have been studied to evaluate their possible impact (if any) on the proposed routes.

2.5. Physiography & Drainage

West Bengal extends from the foot hills of Darjeeling Himalayas in the North to the Bay of Bengal in the South and from the highlands of Chotanagpur in the West to border of Bangladesh and Assam in the East. Physiographically, the State can be divided into 7 regions namely (i) The Northern Mountain region, (ii) The Western Plateau Fringe, (iii) The Plains, (iv) Tarai region, (v) Rarh region, (vi) The Sundarban Delta, & (vii) The Coastal fringe.

The north western portion of West Bengal, where the pipeline is proposed, is highly mountainous belonging to the eastern Himalayan range. This region covers most of Darjeeling and Jalpaiguri districts. This region is having raised mountain ranges in the north and down slope on the border of Jalpaiguri district. The maximum elevation in this region is around 4000 m above sea level. Teesta river divides this region into the western and eastern parts. Some remnants of Siwalik mountain ranges are seen in the Jalpaiguri district. The Western Plateau Fringe region is in the western part of the State which is a rolling upland with small isolated hills. The remaining area of West Bengal is a Plain. Ganga river flows from west to east and divides the plains into northern plains and southern plains. These plains are formed mainly by the alluvium of the Ganges and its tributaries. Terai region is the belt of marshy grasslands, savannas and forests at the base of the Himalayan ranges with heights of 400-600 m above sea level and gentle slope from north to south. The region between south Ganges delta and western Plateau region is the Rarh region

with elevation from 50-100 m. Sunderban Delta is the largest mangrove forest and consists of the Hoogly river estuary and newly created Ganges delta region consisting of mudflats, tidal creeks and newly formed islands. The general elevation of this region is about 10 m above sea level. The extreme south portion of the State is the Coastal fringe region made up of sand or mud deposits.

The State of West Bengal has many rivers with intricate drainage network. In general, the rivers flow in the south or south-easterly direction to join the Ganga and Bramhaputra rivers and finally draining into the Bay of Bengal. The river system of West Bengal can be divided into (i) the rivers of North Bengal, (ii) the Ganga-Padma system, (iii) the Bhagirathi-Jalangi-Churni system, (iv) the western tributaries of Bhagirathi, and (v) the tidal creeks of Sundarbans.

The State of Sikkim is characterized by hilly and mountainous terrain with cliff, deep gorges and valleys. The elevation in the State ranges from 280 m to 8596 m. The Kanchenjunja (8596 m) which is the third highest point of the world is in Sikkim situated in the border between Sikkim & Nepal. The other major peaks of Sikkim are Jonsang (7444 m), Tahing (7351 m) and Kabru (7338 m).

Numerous snow-fed streams have carved out river valleys in the west and south of the Sikkim State. These streams combine into the Teesta River and its tributary, the Rangeet which flows through the state from north to south. There are about 104 major and minor rivers, more than 80 glaciers, about 220 high altitude lakes, 5 major hotsprings and 28 mountain peaks in the state of Sikkim

2.6. Description of Route

The take-off is from the SV-13 station of GAIL pipeline near Belacoba village and passes through agriculture fields, tea plantations and through River area before crossing NH-31.The starting point is located to the South east of Siliguri city and runs in the northern direction.

This pipeline, if implemented, would cater to the demands along the route especially the cities of Siliguri - Jalpaiguri and Gangtok. The pipeline route traverses through the agricultural lands, Tea Estates and then crosses the Teesta River. The line then passes through the Tea estates till it crosses the NH-31. It also crosses the Railway line at Bagrakote. After crossing the Railway track near Bagrakote, it goes all along the NH-717A (Siliguri-Gangtok road) and continues up to the Terminal point near Ranipool in Gangtok.

The study of the Toposheets has indicated that except for the plain areas near Siliguri - Jalpaiguri cities, the major portion of the region is hilly / mountainous and along the highway roads. Therefore, major portion of the alignment have been proposed along the existing National Highway connecting Siliguri and Gangtok cities.

The proposed pipeline, in general runs in South- North Direction from Siliguri to Gangtok. It passes near / through the major settlements of Belacoba, Odlabari, Bagrakote, Ladam Khasmahal, Rhenak, Yangtam, Namli and Nandok.

The alignment also passes through several villages viz., Belacoba, Odlabari, Bagrakote, Ladam Khasmahal, Rhenak, Yangtam, Namli, Nandok and Ranipool are the villages through which the proposed alignment passes through before it gets terminated at Chainage of 185.618 km.

Most of the line runs parallel to Teesta River at the starting. The road is quite good from Bagrakote up to Gangtok. From Bagrakote, the width of the road is 6-8 m up to the Sikkim border with no much space between the blacktop portion and the drain.

On the valley side, it is a cliff at most stretches. From Sikkim border onwards, the road is slightly better (around 10 m. RoW). Even though the proposed pipeline runs in the Ghats along the NH, the gradient is observed to be always within 8° throughout the length. The pipeline, on its way, comes across several

small villages. The villages are located along the NH. Because of the hilly terrain, the road has to negotiate many curves and the road pinches and swells at many locations. There is a moderate traffic along the highway during most parts of the day. The lowest elevation along the stretch is 93.313 m near the tap-off point and the highest elevation is 2203.456 m at a Chainage of 108.202 Km, near Lava Forest / Kolbong Forest Ranges in West Bengal.

Several Bridges have been constructed to cross the rivers/ streams. These are meant for vehicle movement only and pipeline may be laid by constructing the bridges parallel to the existing ones. The existing highway road is laid along the foot hills, and therefore there is no much variation in the gradient along this route.

It is observed that all along the Ghat section, on one side of the road high rise hill ranges having more than 75° angle and on the other side deep valleys with more than 75° angle. Therefore, it is very difficult to take the pipeline either on the ridges or in the valleys. The Total Length of the proposed alignment in this option is 185.618 km. About 75% of the alignment passes through the ghat roads within the hilly areas. It passes through the RoW of the NH which is within Forest limits for a length of 136.084 km both in West Bengal and Sikkim State whereas the length of 49.534 Km is in plain areas in West Bengal state. The total length of pipeline runs in West Bengal is about 142.636 Km and in Sikkim is about 42.982 Km.

Table 1: List of Crossings

S. NO.	CROSSING DETAILS	CHAINAGE (M)	CROSSING BETWEEN - TP Nos.
1	Railway	1424.81	TP3-TP4
2	HT Line	5187.42	TP31-TP32
3	HT Line	5213.75	TP31-TP32
4	Canal	5790.65	TP32-TP33
5	River	6677.62	TP33-TP34
6	Canal	7069.37	TP34-TP35
7	Teesta River	16302.62	TP77-TP78
8	Khulmai River	19683.38	TP78-TP79
9	River	23130.78	TP82-TP83
10	Drain	23309.87	TP83-TP84
11	Canal	24205.39	TP88-TP89
12	River	30267.09	TP104-TP105
13	Drain	37682.53	TP107-TP108
14	Drain	41707.31	TP116-TP117
15	Drain	41897.10	TP117-TP118
16	Railway	41956.18	TP118-TP119
17	Drain	42229.08	TP120-TP121
18	Drain	42269.02	TP120-TP121
19	NH-31	44885.27	TP134-TP135
20	River Chel	45519.38	TP139-TP140
21	Ghish River	48392.57	TP159-TP160
22	Ghish River	48814.37	TP162-TP163
23	NH-31	49018.91	TP164-TP165
24	Railway	49544.96	TP170-TP171
25	Drain	50879.32	TP183-TP184
26	River	53073.95	TP203-TP204
27	NH-717A	55734.03	TP263-TP264
28	NH-717A	80264.86	TP1012-TP1013
29	NH-717A	81093.88	TP1021-TP1022
30	NH-717A	81308.41	TP1027-TP1028
31	NH-717A	81631.72	TP1032-TP1033
32	NH-717A	81908.13	TP1038-TP1039
33	NH-717A	82465.83	TP1043-TP1044
34	NH-717A	82885.06	TP1054-TP1055
35	NH-717A	83974.03	TP1065-TP1066
36	NH-717A	85704.96	TP1090-TP1091
37	NH-717A	86913.11	TP1097-TP1098
38	NH-717A	87812.11	TP1114-TP1115

39	NH-717A	88646.12	TP1130-TP1131
40	NH-717A	88662.33	TP1130-TP1131
41	NH-717A	89278.64	TP1152-TP1153
42	NH-717A	95255.48	TP1325-TP1326
43	NH-717A	95879.10	TP1339-TP1340
44	NH-717A	97875.80	TP1374-TP1375
45	NH-717A	97949.01	TP1377-TP1378
46	NH-717A	98260.75	TP1386-TP1387
47	NH-717A	98432.88	TP1394-TP1395
48	NH-717A	98585.38	TP1399-TP1400
49	NH-717A	98717.20	TP1403-TP1404
50	NH-717A	98962.51	TP1409-TP1410
51	NH-717A	99104.64	TP1414-TP1415
52	NH-717A	99900.55	TP1429-TP1430
53	NH-717A	100159.64	TP1435-TP1436
54	NH-717A	105650.03	TP1561-TP1562
55	NH-717A	105832.80	TP1567-TP1568
56	NH-717A	107595.19	TP1606-TP1607
57	NH-717A	110111.08	TP1669-TP1670
58	NH-717A	110406.35	TP1678-TP1679
59	NH-717A	112155.89	TP1725-TP1726
60	NH-717A	112351.43	TP1729-TP1730
61	NH-717A	112565.46	TP1736-TP1737
62	NH-717A	112854.83	TP1747-TP1748
63	NH-717A	119828.70	TP1972-TP1973
64	NH-717A	124327.53	TP2087-TP2088
65	NH-717A	124445.71	TP2092-TP2093
66	NH-717A	127952.38	TP2180-TP2181
67	NH-717A	128318.20	TP2191-TP2192
68	NH-717A	128981.19	TP2207-TP2208
69	NH-717A	129452.51	TP2220-TP2221
70	NH-717A	130540.37	TP2243-TP2244
71	NH-717A	130862.39	TP2253-TP2254
72	NH-717A	130968.98	TP2256-TP2257
73	NH-717A	131297.00	TP2266-TP2267
74	NH-717A	131801.16	TP2287-TP2288
75	NH-717A	132048.58	TP2299-TP2300
76	NH-717A	132322.87	TP2310-TP2311
77	NH-717A	132532.96	TP2318-TP2319
78	NH-717A	132677.69	TP2322-TP2323
79	NH-717A	133101.52	TP2335-TP2336
80	NH-717A	133626.29	TP2348-TP2349
81	NH-717A	133876.96	TP2355-TP2356

82	NH-717A	135626.93	TP2394-TP2395
83	NH-717A	136338.26	TP2410-TP2411
84	NH-717A	136795.06	TP2422-TP2423
85	NH-717A	139562.75	TP2497-TP2498
86	NH-717A	139646.65	TP2501-TP2502
87	NH-717A	139721.96	TP2506-TP2507
88	NH-717A	140991.77	TP2532-TP2533
89	NH-717A	141182.07	TP2538-TP2539
90	Rishi Khola River	141990.67	TP2559-TP2560
91	NH-717A	142034.04	TP2561-TP2562
92	NH-717A	143985.36	TP2607-TP2608
93	NH-717A	145550.73	TP2644-TP2645
94	NH-717A	148687.19	TP2716-TP2717
95	NH-717A	148937.84	TP2724-TP2725
96	NH-717A	149592.83	TP2745-TP2746
97	NH-717A	150119.34	TP2762-TP2763
98	NH-717A	150825.39	TP2781-TP2782
99	NH-717A	151620.17	TP2803-TP2804
100	NH-717A	152228.50	TP2824-TP2825
101	NH-717A	152770.60	TP2839-TP2840
102	NH-717A	153052.78	TP2849-TP2850
103	Rangpo Chu River	154889.67	TP2885-TP2886
104	NH-717A	154990.69	TP2885-TP2886
105	NH-717A	155431.42	TP2905-TP2906
106	NH-717A	155856.54	TP2919-TP2920
107	NH-717A	156264.76	TP2930-TP2931
108	NH-717A	156819.86	TP2947-TP2948
109	NH-717A	158034.61	TP2979-TP2980
110	NH-717A	158891.31	TP3003-TP3004
111	NH-717A	160504.51	TP3045-TP3046
112	NH-717A	160849.04	TP3058-TP3059
113	NH-717A	160957.09	TP3062-TP3063
114	NH-717A	161150.15	TP3068-TP3069
115	NH-717A	161328.17	TP3074-TP3075
116	NH-717A	162387.49	TP3101-TP3102
117	NH-717A	163384.78	TP3125-TP3126
118	NH-717A	164502.23	TP3150-TP3151
119	NH-717A	166245.87	TP3195-TP3196
120	NH-717A	166328.20	TP3198-TP3199
121	NH-717A	166514.45	TP3204-TP3205
122	NH-717A	166692.77	TP3208-TP3209
123	NH-717A	167310.12	TP3221-TP3222
124	NH-717A	167768.09	TP3233-TP3234

125	NH-717A	170031.87	TP3287-TP3288
126	NH-717A	170975.10	TP3313-TP3314
127	NH-717A	172419.82	TP3344-TP3345
128	NH-717A	172597.70	TP3350-TP3351
129	NH-717A	173593.25	TP3374-TP3375
130	NH-717A	175121.11	TP3415-TP3416
131	NH-717A	177074.47	TP3466-TP3466A
132	NH-717A	178699.76	TP3503-TP3504
133	NH-717A	178995.02	TP3513-TP3514
134	NH-717A	179989.74	TP3536-TP3537
135	NH-717A	180395.74	TP3546-TP3547
136	NH-717A	180672.40	TP3551-TP3552
137	NH-717A	180751.60	TP3555-TP3556
138	NH-717A	180850.32	TP3559-TP3560
139	NH-717A	180918.58	TP3562-TP3563
140	NH-717A	180988.78	TP3565-TP3566
141	NH-717A	181047.12	TP3568-TP3569
142	NH-717A	181823.75	TP3591-TP3592
143	NH-717A	181924.58	TP3595-TP3596
144	NH-717A	184140.15	TP3654-TP3655
145	NH-717A	184436.17	TP3662-TP3663

3. GENERAL INFORMATION ABOUT THE PIPELINE

The route alignment runs through Jalpaiguri & Darjeeling Districts of West Bengal and East District of Sikkim.

A brief about the districts is as under;

***Table 2:* District wise Length of Route**

S.NO	STATE	DISTRICT	TEHSIL	FROM CHAINGE (KM)	TO CHAINGE (KM)	Distance (KM)
1	WEST BENGAL	JALPAIGURI	RAJGANJ	0.000	5008.446	5008.446
2	WEST BENGAL	JALPAIGURI	JALPAIGURI	5008.446	5483.141	474.695
3	WEST BENGAL	JALPAIGURI	RAJGANJ	5483.141	5993.994	510.852
4	WEST BENGAL	JALPAIGURI	JALPAIGURI	5993.994	15464.169	9470.175
5	WEST BENGAL	JALPAIGURI	MAL	15464.169	52316.252	36852.083
6	WEST BENGAL	DARJILING	KALIMPONG - 1	52316.252	93052.594	40736.342
7	WEST BENGAL	DARJILING	KALIMPONG - 2	93052.594	142636.757	49584.163
8	SIKKIM	EAST DISTRICT	RONGLI	142636.757	148381.775	5745.018
9	SIKKIM	EAST DISTRICT	PAKYONG	148381.775	150637.209	2255.434
10	SIKKIM	EAST DISTRICT	RONGLI	150637.209	151644.168	1006.959
11	SIKKIM	EAST DISTRICT	PAKYONG	151644.168	185618.385	33974.217

State / District wise Length Summary

S.No	State	District	Length (in Kms)
1	West Bengal	Jalpaiguri	52.316
2	West Bengal	Darjeeling	90.321
3	Sikkim	East District	42.982

3.1 Jalpaiguri District

Jalpaiguri is a part of West Bengal which is situated in North Bengal. The district situated in the northern part of West Bengal has international borders with Bhutan and Bangladesh in the north and south respectively and district borders with Darjeeling hills in the west and northwest and Alipurduar district and Cooch Behar district on the east.

The name Jalpaiguri came from the word “Jalpai “ meaning “Olive” which grew in the town and adjacent areas and were even visible in the 1900 . The suffix “guri” means a place. The district is located 26° 16 ’ and 27° 0 ’ North latitude and 88 ° 4 ’ and 89 °53 ’ East longitude . It is situated in the northern part of the state of West Bengal and shares international borders with Bhutan and Bangladesh in the northeast and south respectively . The remaining borders are shared with the district of Darjeeling in the west & northwest , Kalimpong district in the north , Coochbehar district in the Southeast and Alipurduar district in the west .The district is primarily comprised of a rural population with a high number of SCs/STs present. A sizeable population also resides in the tea gardens which are spread all over the district. . ‘Tea’, ‘Timber’ and ‘Tourism’ form the backbone of the trade industry in this district. Agriculture and animal husbandry is also practiced extensively throughout the district. Jalpaiguri is a part of the monsoon zone of South eastern Asia. May is the hottest month of this region with average maximum temperature of about 32° C. Whereas January is coolest with 11°C. The average annual humidity of the district is of 82 % and the rainfall is 3160 mm. December is

the driest month with average rainfall of 0.2mm and July is the wettest with 809.3 mm. The topography of the district is diverse and is crisscrossed with rivulets, rivers, plains and hills. It is a haven for tourists who want to connect to nature in its purest form. Places in the forest areas like Marti, Chapramari and Gorumara are one of the most sought after forest destinations in the country. The fauna of this region consists of wildlife like the Indian One horned rhinocerous, hispid hare, pygmy hog, elephants, gaur, leopard, sambar, cheetal, barking deer, badger, rhesus, sloth bear, otter, king cobra, hornbill, lesser adjutant stork etc.

According to the 2011 census Jalpaiguri district has a population of 3,872,846, roughly equal to the nation of Liberia. This gives it a ranking of 66th in India (out of a total of 640). The district has a population density of 621 inhabitants per square kilometer (1,610/sq mi). Its population growth rate over the decade 2001-2011 was 33.77%. Jalpaiguri has a sex ratio of 954 females for every 1000 males, and a literacy rate of 79.79%. According to the 2011 census, 66.3% of the population spoke Bengali, 14.43% Sadri, 6.75% Nepali, 4.29% Hindi, 2.87% Rajbongshi and 2.05% Kurukh as their first language.

It is home to Gorumara National Park, which was established in 1994 and has an area of 79 km2 (30.5 sq mi). Apart from Gorumara National Park, the district contains Chapramari Wildlife Sanctuary.

Jalpaiguri is well connected with rest of the part of West Bengal. It is also good connected with all over India. New Jalpaiguri Railway Station is one famous rail station for the tourists who are visiting North East. One can avail train from the major railway stations in the vicinity like New Jalpaiguri railway station/ Jalpaiguri/ Jalpaiguri Road/ New Maynaguri railway station/ New Mal Junction railway station. By road it is connected with rest of the country. Air travel is available up to Bagdogra Airport, and from there it is connected by a 20 km expressway from the district border.

Jalpaiguri is part of monsoon climate zone of South-Eastern Asia. May is the hottest month of this region with average maximum temperature of about 32 °C whereas January is coldest with 11 °C. Highest ever recorded maximum and minimum temperature are 40 °C and 2 °C. The average annual humidity in the district is of 82%. The annual average rainfall is 3160mm. December is the driest month with average rainfall 0.2 mm and July is wettest with 809.3 mm. Number of rainy days are 0 to 1 during November to February and 24 days during July. Thunderstorms are common weather phenomenon during May.

The Gondwana group of rocks occurring in the Darjeeling and the Jalpaiguri districts consists of pebble/boulder, quartzite, sandstone, slates, carbonaceous slates and coal seams.

Jalpaiguri is the largest district of North Bengal and shares international borders with Bangladesh and Bhutan in the south and north respectively. It is also bordered by the Darjeeling hills and Assam in the northwest, west and east. This little stretch of land lying between Gangetic West Bengal and the Darjeeling Himalayas is a haven of natural beauty with vast tracts of forest land, gurgling rivers, lush green tea gardens, and surrounding hills making it a much sought after tourist destination.

Known for its pristine landscape which has remained unchanged through the different phases of history, Jalpaiguri is protected from the adverse effects of globalization. It retains much of its natural freshness and old world charm. This beautiful district lies on the Teesta floodplains which is the second largest river after the Ganges in West Bengal.

Jalpaiguri district is the base for several national protected zones or wildlife sanctuaries like the Gorumara National Park, Buxa Tiger Reserve, Jaldapara National Park and Chapramari Wildlife Sanctuary. Jalpaiguri positional advantage which includes the nearby Himalayan ranges and large perennial

water bodies, marshes, wetlands, forests and adjacent tea gardens make it a suitable natural habitat for a wide variety of birds.

The topography of Jalpaiguri is interspersed with hills, rivers and rivulets. It is veined by major rivers like the Jaldhaka, Teesta, Torsha, Dyna, Raidak, Neora, Dyna and Sankosh. It is one of the major centers of tea cultivation in India. Covered with large tracts of dense forests, and lush green tea plantations, the district has aptly been named as the land of “Tea, Timber, and Tourism”. Since a large part of the district is bordered by Bhutan in the north, it is named Dooars/Duars which means passage or door of Bhutan. Jalpaiguri lies in the middle of the vast fertile plains (Terai) south of the Himalayas, watered by innumerable rivers and rivulets rising from and flowing down the Himalayas.

Jalpaiguri is blessed with a great diversity of flora and fauna. The vegetation changes according to altitude in North Bengal. Hence while the foothills of the Himalayas are covered with Sal trees, in higher altitudes various ferns and wild grass flourish. The natural vegetation also includes Lagerstromea speciosa (Jarul), Caesalpinia pulcherrima (Krishnachura), Delonix regia (Golmohor/Radhachura), Butea monosperma (Palas), Cassia fistula (Sonalu/Bandarlathi), Ficus glomerata (Dumur), Ceiba pentandra (Simul), Anthocephalus chinensis (Kadam), Ficus bengalensis (Bot) and many others. Some of the fruit plants of Jalpaiguri district are the jackfruit, mango, lichi, bor and guava.

The rich flora of Jalpaiguri provides sufficient attraction for the variety of birds who nest here and which provides them with food. Insects and other small animals thrive in the numerous shrubs and grasslands which dot the region. Indian One Horned Rhinoceros can be found in both Gorumara National Park and Jaldapara Wildlife Sanctuary. Species like the Hispid Hare and Pygmy Hog have been found in Gorumara National Park. Bengal Florican- an endangered bird had been photographed in Jaldapara wildlife sanctuary. Other species include Elephant, Gaur, Leopard, Tiger, Sambar,

Cheetal, Hog deer, Barking Deer, Badger, Rhesus, Sloth Bear, Otter, Wild Boar, King cobra and Assamese macaque, Hornbill, Lesser Adjutant Stork.

There are several national parks in Jalpaiguri district like the Buxa Tiger Reserve, Gorumara National Park, Chapramari Wildlife Sanctuary, Jaldapara National Park and others which are the habitat of varying species of wildlife. Some of the common animals found here include Tiger, Leopard, Elephants, One-horned Rhinoceros, Turtle, Black Panther, Clouded Leopard, Barking Deer, Himalayan Black Bear, Python, Gaur, Pangolin, Indian Pied Hornbill, Peafowl, Raptors, Black necked Crane and varying Butterfly species

3.2 Darjeeling District

The District Darjeeling lies in the northernmost part of the State of West Bengal having the shape of an irregular triangle. Geographically, the northern portion of the district is a part of the Great Himalayas which is at the height of 300 to 12000 feet from the mean sea level and in the southern portion lies in the Tarai region stretching along the base of the hills. Historically, the hilly areas under Darjeeling district were inhabited by the Lepchas, Limbus, Bhutias, Tibetans and various Nepalese castes and tribes since ancient time. On the other hand, the Plains, covered by thick forest, were populated by indigenous tribal groups like Meche, Koch, Rajbangshi, Dhimal and others mainly living upon nomadic cultivation and Jhoom cultivation. (Ref. District Gazetteers, Darjeeling, 1907 Edition, Author - LSS O'Malley, ICS, Superintendent of Census) There are several versions of the origin of the name Darjeeling (also spelt as Darjeeling). As per one version, the name 'Darjeeling' came from two Tibetan words, 'dorje' meaning thunderbolt (originally the scepter of Indra/Bajra) and 'ling' a place or land, hence 'the land of the thunderbolt'. Alternatively, it is named after an old Tibetan Monastery originally situated at the Observatory Hill of Darjeeling Town.

After independence, the Darjeeling district was formed in 1947 having jurisdictional features almost similar to the modern day formation. Siliguri Municipal Corporation (partly spread over district Jalpaiguri) gained its importance functioning as the Gateway to the North Eastern States including Assam and Sikkim. Darjeeling Himalayan Railway granted World Heritage status by UNESCO in the year 1999.

The first regular Census under British regime was conducted in Darjeeling in the year 1871-72 showing a population figure of 94,712 which increased manifold to 1,55,179 by the next Census in 1881 and within Census 1901 the population of Darjeeling grew to as much as 2,49,117.

The population of the district continued to increase at a steady pace during next decades and by 1941 it almost touched the four lakhs mark at 3,90,899. As per the first Census after independence of 1951, the population of Darjeeling district was 4,59,617, an increase of almost 73 per cent during 50 years from 1901. After independence, the growth rate of population gradually decreased (with an exception in the decade 1971-81) adding lesser people to the bounty. As per Census 2011, the population of Darjeeling stands at 18,46,823 with 9,37,259 males and 9,09,564 females.

Geographically the district is spread over 27013' North to 26027' North Latitude and 88053' East to 87059' East Longitude and has an area of 3149 sq. km., area wise sharing the 14th position in the state with another district Hugli. Administratively, district Darjeeling is divided into four Sub-Divisions consisting of 12 Community Development Blocks (C.D. Blocks)

Darjeeling district is the only district of West Bengal consisting hills and mountains as a part of the mighty Himalayas. Geographically, hilly areas of Darjeeling are a part of the Shivalik Range or Outer Himalayas. Beyond the mountains in the North, starts the flat plain of the Tarai at South and South-East part of the district. Thus, the physiography of Darjeeling can be broadly

divided into Hills and Plain land. The natural slope of the land is from North to South. Numerous rivers and springs flow South-wards emerging from the hills at the North, the most important being river Teesta, which, by its typical position, divides the hilly range to East and West. The Geology of Darjeeling ranges between Archaean to Pleistocene Sub-Recent and Recent formation. The soil of Darjeeling district is mainly consisting of Granite, Gneiss, Shales, Boulders, Pebbles with most importantly Sandstone and solidified but poorly consolidated clutter of Conglomerate formations, which, are basically permeable sediments and has lesser capacity of water retention. The poor water retention capacity of the soil clubbed with steep land slope (from North to South, and South-East) and lack of vegetation has made the land very prone to landslides and a considerable portion of the district falls under Seismic Zone IV (in a scale of I to V in ascending order of propensity of Seismic Activity), making it very prone to the earthquakes. Gneiss is seen in the North Western part of Darjeeling and Kurseong areas. Based on the Geological formation, Soil, Topography, Climatic conditions, type of Natural Vegetation etc. the Darjeeling Himalayas comprising of Dooars is included in the Meso Sub-Region of North Eastern Himalayas under Macro-Regional Division of Northern Himalayas.

Darjeeling district by its typical topography is enriched with numerous rivulets coming down from the mighty Himalayas in the North and flowing to the Tarai region in 16 the South and South-East. The major rivers in the district are Teesta (also pronounced as Tista), Mahananda, Jaldhaka, Rangeet, Rammam, Balason, Mechi, Ghish and many other named and unnamed torrents. Because of its hilly topography for a large portion of the terrain, no rivers in Darjeeling district is navigable throughout the year and are prone to landslides and flooding during monsoons. River Teesta (also spelt as Tista) is the most important river of Darjeeling district. : River Jaldhaka flows at the Eastern most portion of district Darjeeling and forms the natural boundary (international boundary) with Bhutan flowing from North to South. River Mahananda is also known as Mahanadi or Mahaldi. It is originated from the

Mahaldiram Hills at East of Kurseong from an elevation 6,900 ft. and flows in a North-South direction through the district up to Siliguri.

Due to its distinctive topographical features having hills in a larger portion of the district surrounded by the plain-lands of Tarai towards South and South-East, Darjeeling district has two different climatic conditions. The Hills have a temperate weather condition, with pleasant summer and cold winter with occasional snowfall. On the other hand, the marshy tract of Tarai is humid and warm, showing typical Tropical and SubTropical climatic conditions depending upon the elevation. The moist air from the seas is crashes with the Himalayan range in the North causing a high moisture level throughout the area.

As per the available temperatures recorded, the maximum temperature for the plains usually stays at around 37° Celsius during the peak of monsoon i.e. in the month of July of August while the moisture content in the air also reaches its peak. On the other hand, the minimum temperature is reached during the months of January-February at around 7° Celsius.

The land share of district Darjeeling is modest in comparison to other districts in the state and it ranks 14th in terms land area in the State. Due to its mountainous terrain, fortunately, for a large proportion of land there is still a forest cover.

District Darjeeling, owing to its diverse geo-morphological conditions, has different agro-climatic conditions. The highest altitudes are covered with snow almost through-out the year and are unsuitable for crop cultivation. The lower hills are mainly used for plantation crops like Tea, Cinchona and Rubber. Darjeeling district is also famous for variety of fruits and vegetables grown at different elevations. Pineapples are the highest growing fruit variety in the district. The plantation of Tea in district Darjeeling is as old as the history of the Darjeeling town itself.

Despite a hilly terrain and high altitude, district Darjeeling has a very wide spread road-network covering almost all areas of the district. Since the expansion of British territory in the early Nineteenth Century across the area, structured transformation of the hilly rural roads to metalled and non-metalled road took place and within the end of Nineteenth Century, owing to the important strategic location, far-flung places of the district were well connected with district Head Quarter at Darjeeling Town.

The Darjeeling Himalayan Railway presently its journey starts from the New Jalpaiguri Railway Station near Siliguri and stretches upto Darjeeling Town travelling a distance of 78 Kilometres. In the journey the elevation level changes from 100 Metres above sea level to 2,200 Metres. However, owing to the factors like steep changes in elevation, existence of several Loops in the path and a journey through a landslide prone path, the services in the complete route is hindered. The Road network of district Darjeeling is well built and several National and State Highways pass through the district. NH-31, NH-31A, NH-31C and NH-110 cross the district and important locations are connected by SH-12 and SH-12A beside numerous medium, small and minor road networks. The oldest Hydro-Electric power plant in India is located in district Darjeeling at a distance of 12 kilometers from the Darjeeling town is known as Sidrapong Hydel Power Station.

3.3 Sikkim East District

East District is the third largest in area but most populous district in Sikkim. It was part of the erstwhile kingdom of Sikkim. Gangtok is the district headquarters as well as the present capital of the state. It is the fourth capital of Sikkim. In the year 1894 king Thutob Namgyal shifted the capital from Tumlong in North district to Gangtok. The Nathula Pass located in the district formed the offshoot of the famous ancient Silk Route which connected Lhasa to India and at present also border trade is conducted between traders from

Sikkim and Tibetan Autonomous Region of China through this pass.Special permit is required to visit certain tourist places like Tsomgo (Changu) Lake, Baba Mandir and Nathula Pass located in the border areas of the district. World famous Rumtek monastery and about 300 years old Enchey monastery is also located in the district.

According to 2011 Census east district has total population of 281293 persons with a density of 295 persons per square kilometer. Its decadal (2001-2011) population growth is 14.79% with a sex ratio of 872 females per 1000 males and a literacy rate of 84.67%. Nepali, Bhutia and Lepcha are the main ethnic community of the district and it also has sizeable number of people from other states of India.

East District is located at latitude 27 19' N and longitude 88 36' E and occupies an area of 954 sq.km. Gangtok lies at an altitude of 1800 m . This district occupies the southeast corner of the state. It is bounded by North District in the north, China and Bhutan in the East, Darjeeling district of the state of West Bengal in the South and South District in the western side.

East district of Sikkim is totally hilly region and the areas bordering China is usually covered with snow. Almost three fourth area of the district is forest area. The topography of the district is totally mountainous, hilly terrain.

The total Geographical Area of East District is 954 sq. km. and its 73.27 percent area i.e. 699 sq.km.is covered by different types forests with dense mixed vegetation rich in bio-diversity. Flowering species like Magnolia and Rhododendrons are also available in this forest and the vegetation usually thins out in higher altitude areas and mainly comprises of scrubs and shrubs.

Gangtok city is the district headquarter and the capital city of the state. For administrative purpose the district has been further divided in to three sub-divisions namely Gangtok, Pakyong and Rongli. These Sub-divisions are

further supported by a network of ten Block Administrative Centres and fifty three Gram Panchayat units.

The district is mainly drained by the perennial Tista River with tributaries Dik Chhu, Rate Chhu and Rangpo Chhu. The normal annual rainfall is of the tune of 3800 mm. The district is characterized by cool and humid climate. It receives adequate rainfall from south-west monsoon, which sets in the latter half of June and continues up to the middle of October. Pre-monsoon rains are received during March-April. Maximum and minimum temperatures as recorded are 27.5˚ and 1.5˚C

The district is divided into three (3) geomorphic units such as, steep hill, valley, and slope. Soil in the area is mostly derived from parent rocks such as schist, gneiss and colluvial materials. The characteristics of soil vary from place to place due to topographical variations. The texture of the soil is loamy sand to silty clay loam. Soils are generally acidic in nature having the pH value of 5.0 to 6.0. Brown red and yellow soils are found in a small area around Rangpoo town.

The district is a part of the Eastern Himalayas and exhibits identical geological features as in other parts of Eastern Himalayas. Five Geological units encountered in the district are Kanchenjunga gneiss, Darjeeloing gneiss, Chunthang Schists and gneiss, Lingtse granite gneiss and Daling group of rocks consisting of Phyllite, slates, quartzites and schist of Pre-Cambrian age. Quaternary deposits of alluvium are sporadically developed along the streams and rivers. Due to different sets of structural disturbance numerous fractures, faults, joints, folds etc., have developed in the rocks occurring in the district.

4. ECOLOGICALLY SENSITIVE AREAS, NATIONAL PARKS, SANCTUARIES, MONUMENTS

Sikkim has 3330.28 sq km i.e. 46.93% of State's total geographical area as Protected Area with 1 National Park including the Khangchendzonga Biosphere Reserve and 7 Wildlife Sanctuaries. Also, each of the Protected Area has its Eco-Sensitive Zone declared ranging from 25 meters to 200 meters around the outer boundary. As on date, Sikkim has the highest State-wise percentage of 30.77% of its total geographical area as Protected Area Network (excluding KBR) in the Country.

5. GENERAL LAND USE

Forestry is the major land use in the State and nearly 83% of the total geographical area of the State is under the administrative control of the State Forest Department. This proportion is one of the largest in the country. The Khangchendzonga National Park (1784 sq.km) is the only National Park in Sikkim and occupies 25.14 % of total geographical area of Sikkim viz. 78.30 % in North District, 18.32 % in West and 3.38 % South Districts. It is also a proposed World Heritage Site under natural and cultural category. In addition Sikkim has seven Wildlife Sanctuaries and one Conservation Reserve. All of these along with Reserve Forests together constitute 47.69% of the total geographical area under forest and tree cover, making it the greenest state in the country.

6. FOREST LANDS

There are some protected / reserved forest patches and bird sanctuaries near the corridor of the route alignment and the same have been completely avoided including the area of influence.

7. HILLY TERRAIN

The route alignment mainly runs through the existing road corridor along the hilly terrain.

8. SURVEY OF INDIA TOPO SHEETS

Pipeline is covered in the following Survey of India Topo Sheets :

Table 3: List of Survey of India Toposheets

S. No	Topo sheet Index No
1	78A11
2	78A12
3	78B9
4	78B10

8.1. Updating of Topo Maps

Existing Topo Maps are not updated with latest developments. There are a number of developments and changes in the area. Topo maps have been rapidly updated for major changes within the pipeline corridor.

9. ADMINISTRATIVE JURISDICTION

The pipeline route runs through the following districts. The details of districts, their crossing lengths are given as under;

Table 4: District wise chainage details

Sr. No.	State	District	Chainage (km)		Total Length (km)
			From	To	
1	West Bengal	Jalpaiguri	0.000	52.316	52.316
2	West Bengal	Darjeeling	52.316	142.637	90.321
3	Sikkim	East District	142.637	185.618	42.982
		Total			185.618

10. DATA REGARDING INFRASTRUCTURES ALONG THE ROUTE-ALIGNMENT

Details regarding setting of stores, availability of construction material, working season, communication facilities and approach roads for various reaches is discussed as under.

Details regarding setting of stores, availability of construction material, working season, communication facilities and approach roads for various reaches is discusses as under.

10.1. Approaches

Since the proposed route is traversing all along the road network to approach the site is very much feasible and for utilization of the existing facilities during the construction and maintenance work.

10.2. Transport

Light as well as heavy vehicle for transportation of men and materials are available at Siliguri. In addition to above Tractor & Trolleys are also required to carry the material at unapproachable locations and are available all along the route alignment.

10.3. Stores

During construction work of the said line, sufficient storing facilities are to be arranged along the highway wherever the possible space is available.

10.4. Labour

Unskilled labour is available all along the route alignment. Skilled and semi-skilled labour has to be brought from other parts of the country. However, most of the semi-skilled labours are available within these states.

10.5. Availability of Petrol & Diesel

Fuel is available at along with roadside petrol pumps on highways near pipeline route.

10.6. Automobile Workshop

For major and minor repairs, automobile workshop facilities are available at Siliguri as well as at Gangtok

10.7. Availability of Construction Material

Cement

Cement of all qualities is available in bulk as well as small quantity at Siluguri and Gangtok

Steel

Steel of all type is mainly available Siliguri and Gangtok requiring transportation of the same within a lead between 20 km to 50 km.

Sand

The route is nearer to some major water bodies including rivers; however sand is available with maximum lead of 20-50 km.

Stone Metal

Metal is available near the alignment at stone crushers. Stone crushers are available near Siliguri and Gangtok. The crusher units can be set up in between to reduce the lead distance. Plenty of crushed stone is available all along the pipeline route.

10.8. Working Period

The working period shall be as under:-

Construction activities are possible in this zone throughout the year except small interruption in rainy season. Hence, about 6 to 8 months working period is available. Moreover, Primary rainy season is June – September. Secondary rainy season is November – December.

10.9. Communication

Telephones including STD facilities are available all along the route alignment

11. ACKNOWLEDGEMENT

We hereby extend our sincere thanks to all the officials Indradhanush Gas Grid Limited (IGGL) for their kind and able guidance extended to us during the detail engineering survey and expect the same in future also.

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
1	TP0	657177.618	2941033.837	88° 34' 41.827" E	26° 34' 52.785" N	62.70	0.00		94.284
2	TP1	657240.267	2941036.461	88° 34' 44.093" E	26° 34' 52.846" N	20.98	62.70	65°16'33"(L)	94.321
3	TP2	657248.236	2941055.867	88° 34' 44.389" E	26° 34' 53.473" N	979.15	83.68	17°33'43"(L)	93.313
4	TP3	657329.554	2942031.635	88° 34' 47.763" E	26° 35' 25.145" N	387.30	1062.83	23°53'29"(L)	93.505
5	TP4	657203.366	2942397.805	88° 34' 43.366" E	26° 35' 37.094" N	888.78	1450.14	44°9'17"(R)	94.834
6	TP5	657577.884	2943203.824	88° 34' 57.262" E	26° 36' 3.133" N	243.97	2338.92	14°38'14"(R)	96.284
7	TP5A	657633.953	2943441.266	88° 34' 59.395" E	26° 36' 10.825" N	232.65	2582.89	6°1'49"(L)	96.284
8	TP6	657643.576	2943673.718	88° 34' 59.847" E	26° 36' 18.374" N	94.26	2815.54	89°32'44"(L)	97.207
9	TP7	657549.426	2943678.364	88° 34' 56.446" E	26° 36' 18.563" N	21.84	2909.80	2°57'14"(R)	96.969
10	TP8	657527.694	2943680.563	88° 34' 55.661" E	26° 36' 18.643" N	29.35	2931.65	2°29'59"(R)	97.003
11	TP9	657498.650	2943684.789	88° 34' 54.613" E	26° 36' 18.792" N	82.96	2961.00	16°11'16"(R)	97.099
12	TP10	657423.139	2943719.148	88° 34' 51.899" E	26° 36' 19.939" N	54.13	3043.96	3°56'51"(R)	97.173
13	TP11	657372.447	2943738.119	88° 34' 50.075" E	26° 36' 20.576" N	13.30	3098.08	25°10'58"(R)	96.694
14	TP12	657363.158	2943747.639	88° 34' 49.744" E	26° 36' 20.889" N	22.69	3111.38	78°22'49"(R)	96.746
15	TP13	657375.872	2943766.431	88° 34' 50.212" E	26° 36' 21.495" N	4.77	3134.07	86°45'39"(R)	96.667
16	TP14	657379.967	2943763.986	88° 34' 50.359" E	26° 36' 21.413" N	52.19	3138.84	85°46'48"(L)	96.897
17	TP15	657409.946	2943806.702	88° 34' 51.461" E	26° 36' 22.789" N	70.32	3191.03	6°22'45"(R)	96.915
18	TP16	657443.699	2943868.394	88° 34' 52.709" E	26° 36' 24.780" N	70.91	3261.35	0°32'29"(L)	96.111
19	TP17	657477.142	2943930.919	88° 34' 53.946" E	26° 36' 26.798" N	125.95	3332.26	0°33'28"(L)	96.939
20	TP18	657537.626	2944041.395	88° 34' 56.181" E	26° 36' 30.364" N	47.84	3458.21	1°39'2"(R)	96.806
21	TP19	657559.380	2944083.999	88° 34' 56.987" E	26° 36' 31.739" N	43.51	3506.04	2°59'32"(R)	97.279
22	TP20	657581.160	2944121.661	88° 34' 57.791" E	26° 36' 32.954" N	41.49	3549.55	4°29'49"(R)	97.534
23	TP21	657604.683	2944155.838	88° 34' 58.657" E	26° 36' 34.055" N	227.55	3591.04	45°18'29"(R)	98.014
24	TP22	657828.666	2944195.950	88° 35' 6.771" E	26° 36' 35.269" N	64.96	3818.58	45°45'35"(R)	99.161
25	TP23	657881.479	2944158.131	88° 35' 8.663" E	26° 36' 34.018" N	22.47	3883.54	88°10'25"(L)	98.894
26	TP24	657895.140	2944175.976	88° 35' 9.165" E	26° 36' 34.593" N	20.73	3906.02	45°49'44"(R)	99.195
27	TP25	657887.754	2944195.345	88° 35' 8.906" E	26° 36' 35.225" N	14.47	3926.75	2°46'24"(L)	99.234
28	TP26	657881.951	2944208.597	88° 35' 8.703" E	26° 36' 35.658" N	22.41	3941.21	86°13'4"(R)	99.257
29	TP26A	657899.595	2944222.413	88° 35' 9.347" E	26° 36' 36.100" N	24.56	3963.62	24°5'21"(L)	99.257
30	TP27	657924.109	2944223.844	88° 35' 10.233" E	26° 36' 36.136" N	110.18	3988.18	14°47'42"(R)	98.542
31	TP28	658034.286	2944223.556	88° 35' 14.216" E	26° 36' 36.083" N	56.71	4098.35	29°15'50"(L)	97.723
32	TP29	658083.827	2944251.146	88° 35' 16.019" E	26° 36' 36.959" N	594.05	4155.06	10°14'55"(L)	96.893
33	TP30	658543.115	2944627.905	88° 35' 32.790" E	26° 36' 49.015" N	431.71	4749.11	6°8'48"(L)	94.657
34	TP31	658845.656	2944935.870	88° 35' 43.865" E	26° 36' 58.899" N	152.11	5180.82	22°0'49"(R)	95.776
35	TP32	658985.158	2944996.514	88° 35' 48.936" E	26° 37' 0.813" N	1233.17	5332.93	21°58'44"(L)	95.527
36	TP33	659849.895	2945875.686	88° 36' 20.594" E	26° 37' 29.027" N	360.01	6566.10	26°14'14"(R)	94.489
37	TP34	660189.806	2945994.301	88° 36' 32.936" E	26° 37' 32.742" N	894.22	6926.12	16°35'6"(L)	96.092
38	TP35	660914.876	2946517.661	88° 36' 59.388" E	26° 37' 49.450" N	596.50	7820.34	30°33'32"(L)	94.696
39	TP36	661153.868	2947064.192	88° 37' 8.278" E	26° 38' 7.109" N	286.25	8416.84	38°25'43"(R)	95.552
40	TP37	661406.724	2947198.367	88° 37' 17.482" E	26° 38' 11.364" N	109.53	8703.09	62°24'2"(L)	96.681
41	TP38	661406.050	2947307.894	88° 37' 17.508" E	26° 38' 14.923" N	168.48	8812.62	1°16'42"(R)	96.298
42	TP39	661408.771	2947476.352	88° 37' 17.683" E	26° 38' 20.396" N	57.21	8981.10	6°37'9"(R)	97.545
43	TP40	661416.284	2947533.072	88° 37' 17.981" E	26° 38' 22.236" N	272.88	9038.31	3°12'24"(L)	96.970
44	TP41	661436.925	2947805.167	88° 37' 18.852" E	26° 38' 31.068" N	107.47	9311.19	1°2'34"(L)	97.452
45	TP42	661447.004	2947912.164	88° 37' 19.266" E	26° 38' 34.540" N	57.84	9418.66	7°30'58"(L)	98.144
46	TP43	661444.849	2947969.968	88° 37' 19.214" E	26° 38' 36.419" N	75.14	9476.51	10°23'44"(R)	98.131
47	TP44	661455.644	2948044.328	88° 37' 19.639" E	26° 38' 38.831" N	62.52	9551.64	5°12'33"(L)	98.137
48	TP45	661458.972	2948106.757	88° 37' 19.788" E	26° 38' 40.858" N	34.75	9614.16	4°9'51"(L)	98.493
49	TP46	661458.297	2948141.496	88° 37' 19.779" E	26° 38' 41.987" N	32.30	9648.91	1°27'7"(L)	98.420
50	TP47	661458.488	2948173.791	88° 37' 19.801" E	26° 38' 43.036" N	79.24	9681.20	8°33'32"(R)	98.283
51	TP48	661470.744	2948252.078	88° 37' 20.280" E	26° 38' 45.575" N	47.66	9760.44	1°14'6"(R)	99.305
52	TP49	661479.129	2948298.991	88° 37' 20.605" E	26° 38' 47.095" N	41.31	9808.10	14°45'28"(R)	98.499
53	TP50	661496.516	2948336.465	88° 37' 21.251" E	26° 38' 48.306" N	28.67	9849.41	8°32'27"(L)	99.114
54	TP51	661504.587	2948363.977	88° 37' 21.555" E	26° 38' 49.196" N	33.49	9878.08	2°41'32"(L)	99.136
55	TP52	661512.495	2948396.522	88° 37' 21.856" E	26° 38' 50.251" N	29.42	9911.57	6°4'55"(L)	98.632
56	TP53	661516.373	2948425.681	88° 37' 22.010" E	26° 38' 51.196" N	33.17	9940.99	16°33'32"(L)	98.634
57	TP54	661511.194	2948458.442	88° 37' 21.838" E	26° 38' 52.263" N	59.30	9974.16	3°5'50"(R)	98.960
58	TP55	661505.113	2948517.427	88° 37' 21.645" E	26° 38' 54.182" N	63.22	10033.46	16°13'7"(R)	99.112
59	TP56	661516.452	2948579.620	88° 37' 22.083" E	26° 38' 56.198" N	57.53	10096.67	2°47'15"(R)	99.382
60	TP57	661529.511	2948635.648	88° 37' 22.581" E	26° 38' 58.013" N	22.50	10154.20	11°27'17"(R)	100.165
61	TP58	661538.867	2948656.107	88° 37' 22.929" E	26° 38' 58.674" N	35.84	10176.70	7°11'22"(R)	100.434
62	TP59	661557.733	2948686.577	88° 37' 23.625" E	26° 38' 59.656" N	34.09	10212.54	2°41'45"(R)	100.592
63	TP60	661577.021	2948714.683	88° 37' 24.336" E	26° 39' 0.562" N	13.83	10246.63	9°32'17"(R)	100.935
64	TP61	661586.631	2948724.635	88° 37' 24.688" E	26° 39' 0.881" N	13.40	10260.46	9°21'29"(L)	100.778
65	TP62	661594.246	2948735.657	88° 37' 24.968" E	26° 39' 1.236" N	27.27	10273.86	19°40'6"(L)	100.958
66	TP63	661601.290	2948761.997	88° 37' 25.235" E	26° 39' 2.089" N	34.79	10301.12	32°17'52"(L)	100.630

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
67	TP64	661590.928	2948795.213	88° 37' 24.876" E	26° 39' 3.172" N	22.47	10335.92	40°49'44"(R)	100.664
68	TP65	661599.890	2948815.821	88° 37' 25.209" E	26° 39' 3.838" N	37.40	10358.39	65°16'27"(R)	101.107
69	TP66	661637.284	2948816.619	88° 37' 26.562" E	26° 39' 3.849" N	35.78	10395.79	10°5'18"(R)	100.929
70	TP67	661672.634	2948811.105	88° 37' 27.837" E	26° 39' 3.655" N	41.40	10431.57	19°44'53"(R)	100.454
71	TP68	661708.975	2948791.280	88° 37' 29.142" E	26° 39' 2.996" N	161.76	10472.97	1°46'34"(R)	100.057
72	TP69	661848.507	2948709.451	88° 37' 34.150" E	26° 39' 0.279" N	243.17	10634.72	1°20'46"(R)	99.992
73	TP70	662055.321	2948581.542	88° 37' 41.569" E	26° 38' 56.038" N	139.79	10877.90	0°49'11"(R)	99.968
74	TP71	662173.143	2948506.321	88° 37' 45.795" E	26° 38' 53.545" N	202.05	11017.68	1°21'41"(R)	100.162
75	TP72	662340.811	2948393.582	88° 37' 51.805" E	26° 38' 49.812" N	28.54	11219.73	86°2'46"(L)	101.340
76	TP73	662358.333	2948416.114	88° 37' 52.449" E	26° 38' 50.537" N	218.91	11248.27	6°12'26"(L)	101.070
77	TP74	662473.244	2948602.436	88° 37' 56.690" E	26° 38' 56.543" N	1390.95	11467.18	38°55'18"(R)	95.657
78	TP75	663785.097	2949064.794	88° 38' 44.340" E	26° 39' 11.019" N	56.41	12858.13	44°30'8"(R)	96.076
79	TP76	663836.188	2949040.875	88° 38' 46.176" E	26° 39' 10.220" N	143.93	12914.54	38°43'10"(R)	95.943
80	TP76A	663881.891	2948904.389	88° 38' 47.765" E	26° 39' 5.766" N	134.09	13058.47	17°38'44"(L)	95.943
81	TP77	663957.726	2948793.803	88° 38' 50.456" E	26° 39' 2.142" N	3354.03	13192.56	86°21'27"(L)	96.850
82	TP78	666785.970	2950596.730	88° 40' 33.576" E	26° 39' 59.524" N	3605.07	16546.59	46°48'38"(L)	96.688
83	TP79	667453.647	2954139.433	88° 40' 59.412" E	26° 41' 54.342" N	1892.02	20151.66	23°34'39"(L)	102.595
84	TP80	667031.110	2955983.664	88° 40' 45.006" E	26° 42' 54.443" N	615.48	22043.68	8°52'10"(R)	104.597
85	TP81	666987.800	2956597.614	88° 40' 43.732" E	26° 43' 14.409" N	47.76	22659.16	65°6'9"(R)	107.024
86	TP82	667029.600	2956620.719	88° 40' 45.255" E	26° 43' 15.142" N	432.96	22706.92	16°58'33"(L)	107.105
87	TP83	667330.854	2956931.681	88° 40' 56.303" E	26° 43' 25.116" N	182.67	23139.87	40°38'9"(R)	109.268
88	TP84	667341.865	2957114.021	88° 40' 56.789" E	26° 43' 31.035" N	226.40	23322.54	69°55'36"(R)	108.422
89	TP85	667558.806	2957178.766	88° 41' 4.669" E	26° 43' 33.046" N	41.35	23548.94	43°16'38"(L)	107.494
90	TP86	667579.545	2957214.537	88° 41' 5.437" E	26° 43' 34.199" N	19.62	23590.29	37°31'53"(R)	108.635
91	TP87	667597.689	2957222.001	88° 41' 6.097" E	26° 43' 34.433" N	134.09	23609.91	24°34'20"(L)	107.746
92	TP88	667689.250	2957319.968	88° 41' 9.456" E	26° 43' 37.577" N	751.56	23744.00	33°29'33"(L)	107.373
93	TP89	667814.225	2958061.067	88° 41' 14.334" E	26° 44' 1.602" N	80.23	24495.56	48°34'37"(R)	112.272
94	TP90	667882.375	2958103.406	88° 41' 16.820" E	26° 44' 2.948" N	325.64	24575.79	45°29'29"(L)	108.775
95	TP91	667953.728	2958421.131	88° 41' 19.554" E	26° 44' 13.240" N	1393.19	24901.43	13°47'14"(L)	108.891
96	TP92	667926.255	2959814.048	88° 41' 19.229" E	26° 44' 58.508" N	678.82	26294.62	40°15'27"(R)	111.904
97	TP93	668354.622	2960340.634	88° 41' 34.985" E	26° 45' 15.431" N	523.53	26973.44	26°32'43"(L)	113.665
98	TP94	668468.670	2960851.588	88° 41' 39.358" E	26° 45' 31.983" N	81.84	27496.97	3°32'19"(R)	113.664
99	TP95	668491.394	2960930.209	88° 41' 40.219" E	26° 45' 34.527" N	23.72	27578.80	53°1'10"(R)	114.054
100	TP96	668513.556	2960938.654	88° 41' 41.025" E	26° 45' 34.792" N	32.56	27602.52	22°55'32"(L)	114.157
101	TP97	668537.060	2960961.182	88° 41' 41.886" E	26° 45' 35.514" N	5.22	27635.08	19°58'46"(R)	114.574
102	TP98	668541.366	2960964.128	88° 41' 42.043" E	26° 45' 35.608" N	89.09	27640.29	83°59'37"(L)	115.081
103	TP99	668499.025	2961042.517	88° 41' 40.549" E	26° 45' 38.173" N	20.58	27729.39	86°46'28"(R)	115.134
104	TP99A	668516.557	2961053.303	88° 41' 41.189" E	26° 45' 38.516" N	21.76	27749.97	30°27'45"(R)	115.134
105	TP100	668538.312	2961053.735	88° 41' 41.976" E	26° 45' 38.520" N	416.49	27771.73	14°24'55"(R)	114.186
106	TP101	668954.654	2961064.788	88° 41' 57.050" E	26° 45' 38.699" N	821.36	28188.22	44°8'33"(L)	113.269
107	TP102	669528.680	2961652.258	88° 42' 18.110" E	26° 45' 57.536" N	124.30	29009.58	24°30'16"(L)	111.480
108	TP103	669570.850	2961769.183	88° 42' 19.693" E	26° 46' 1.317" N	252.42	29133.87	41°28'30"(R)	111.220
109	TP104	669792.271	2961890.371	88° 42' 27.766" E	26° 46' 5.158" N	1060.20	29386.29	14°50'41"(L)	110.428
110	TP105	670560.832	2962620.666	88° 42' 55.941" E	26° 46' 28.548" N	1206.82	30446.49	79°1'41"(L)	111.947
111	TP106	669911.239	2963637.747	88° 42' 32.923" E	26° 47' 1.877" N	3050.76	31653.31	7°50'45"(L)	113.483
112	TP107	667933.514	2965960.619	88° 41' 22.447" E	26° 48' 18.205" N	3590.63	34704.07	3°31'33"(R)	123.464
113	TP108	665778.345	2968832.526	88° 40' 5.782" E	26° 49' 52.439" N	794.74	38294.70	29°25'24"(R)	137.978
114	TP109	665675.129	2969620.534	88° 40' 2.419" E	26° 50' 18.085" N	183.09	39089.43	17°16'9"(L)	145.459
115	TP110	665598.531	2969786.829	88° 39' 59.724" E	26° 50' 23.521" N	617.01	39272.52	16°3'32"(R)	147.190
116	TP111	665505.492	2970396.787	88° 39' 56.644" E	26° 50' 43.378" N	119.69	39889.54	12°0'21"(L)	150.180
117	TP112	665463.227	2970508.765	88° 39' 55.166" E	26° 50' 47.034" N	526.54	40009.22	14°26'48"(R)	150.965
118	TP113	665406.070	2971032.197	88° 39' 53.345" E	26° 51' 4.065" N	365.29	40535.77	11°3'42"(L)	153.827
119	TP114	665297.483	2971380.971	88° 39' 49.578" E	26° 51' 15.443" N	383.57	40901.05	24°52'22"(L)	156.372
120	TP115	665039.997	2971665.276	88° 39' 40.386" E	26° 51' 24.789" N	329.65	41284.63	26°1'9"(R)	156.604
121	TP116	664948.320	2971981.923	88° 39' 37.215" E	26° 51' 35.116" N	202.30	41614.28	9°11'27"(L)	159.306
122	TP117	664861.744	2972164.763	88° 39' 34.166" E	26° 51' 41.094" N	127.52	41816.58	39°30'3"(L)	156.989
123	TP118	664746.324	2972218.980	88° 39' 30.010" E	26° 51' 42.904" N	110.57	41944.10	58°49'40"(R)	156.675
124	TP119	664734.745	2972328.942	88° 39' 29.643" E	26° 51' 46.482" N	67.94	42054.67	18°9'57"(R)	159.150
125	TP120	664749.050	2972395.359	88° 39' 30.192" E	26° 51' 48.633" N	159.12	42122.61	30°12'58"(R)	159.141
126	TP121	664856.285	2972512.916	88° 39' 34.133" E	26° 51' 52.407" N	228.11	42281.73	57°25'38"(L)	159.486
127	TP122	664797.029	2972733.198	88° 39' 32.091" E	26° 51' 59.589" N	1591.79	42509.84	62°52'48"(L)	162.226
128	TP123	663240.391	2973065.886	88° 38' 35.855" E	26° 52' 11.057" N	15.39	44101.64	11°50'53"(L)	166.430
129	TP124	663225.001	2973065.944	88° 38' 35.297" E	26° 52' 11.066" N	97.77	44117.03	67°46'23"(L)	175.373
130	TP125	663187.676	2972975.579	88° 38' 33.902" E	26° 52' 8.145" N	273.22	44214.80	8°45'44"(L)	166.067
131	TP126	663123.056	2972710.110	88° 38' 31.437" E	26° 51' 59.548" N	170.29	44488.02	0°39'17"(R)	161.248
132	TP127	663080.893	2972545.124	88° 38' 29.832" E	26° 51' 54.205" N	34.10	44658.30	1°41'20"(L)	160.865

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
133	TP128	663073.427	2972511.850	88° 38' 29.546" E	26° 51' 53.127" N	29.25	44692.41	1°24'1"(L)	160.578
134	TP129	663067.722	2972483.159	88° 38' 29.326" E	26° 51' 52.197" N	24.92	44721.66	18°25'12"(R)	160.699
135	TP130	663055.390	2972461.509	88° 38' 28.869" E	26° 51' 51.499" N	21.50	44746.57	18°59'41"(R)	161.126
136	TP131	663039.251	2972447.311	88° 38' 28.278" E	26° 51' 51.044" N	42.57	44768.07	47°11'37"(L)	161.411
137	TP132	663038.161	2972404.753	88° 38' 28.218" E	26° 51' 49.662" N	32.79	44810.64	18°31'2"(R)	161.072
138	TP133	663026.953	2972373.933	88° 38' 27.798" E	26° 51' 48.665" N	33.21	44843.44	50°17'6"(R)	160.299
139	TP134	662995.692	2972362.721	88° 38' 26.660" E	26° 51' 48.314" N	14.28	44876.65	76°46'56"(L)	159.637
140	TP135	662996.151	2972348.446	88° 38' 26.670" E	26° 51' 47.850" N	83.03	44890.93	89°24'52"(R)	159.760
141	TP136	662913.132	2972349.463	88° 38' 23.663" E	26° 51' 47.918" N	159.79	44973.95	4°25'45"(R)	159.174
142	TP137	662753.978	2972363.754	88° 38' 17.904" E	26° 51' 48.450" N	139.55	45133.75	4°31'6"(R)	159.565
143	TP138	662616.404	2972387.145	88° 38' 12.931" E	26° 51' 49.267" N	79.42	45273.30	6°49'50"(L)	160.810
144	TP139	662537.077	2972391.051	88° 38' 10.059" E	26° 51' 49.427" N	245.61	45352.72	0°53'47"(R)	161.716
145	TP140	662291.979	2972406.967	88° 38' 1.188" E	26° 51' 50.047" N	249.08	45598.34	4°45'3"(L)	161.238
146	TP141	662042.943	2972402.466	88° 37' 52.164" E	26° 51' 50.005" N	281.41	45847.41	4°38'54"(R)	158.591
147	TP142	661762.088	2972420.199	88° 37' 41.998" E	26° 51' 50.699" N	53.09	46128.83	7°23'26"(R)	158.325
148	TP143	661709.970	2972430.333	88° 37' 40.114" E	26° 51' 51.050" N	30.52	46181.92	9°23'36"(R)	158.296
149	TP144	661681.366	2972440.969	88° 37' 39.083" E	26° 51' 51.407" N	47.01	46212.44	0°7'9"(L)	158.201
150	TP145	661637.268	2972457.262	88° 37' 37.493" E	26° 51' 51.955" N	37.98	46259.45	3°12'41"(R)	158.070
151	TP146	661602.435	2972472.400	88° 37' 36.238" E	26° 51' 52.461" N	34.09	46297.43	0°17'28"(R)	158.024
152	TP147	661571.235	2972486.148	88° 37' 35.114" E	26° 51' 52.921" N	37.00	46331.52	1°11'43"(R)	157.989
153	TP148	661537.696	2972501.770	88° 37' 33.907" E	26° 51' 53.443" N	102.29	46368.52	0°8'2"(L)	157.847
154	TP149	661444.867	2972544.745	88° 37' 30.564" E	26° 51' 54.877" N	71.60	46470.82	2°58'3"(L)	157.884
155	TP150	661378.419	2972571.422	88° 37' 28.169" E	26° 51' 55.772" N	74.79	46542.42	3°38'28"(R)	157.601
156	TP151	661310.925	2972603.637	88° 37' 25.739" E	26° 51' 56.847" N	37.48	46617.21	4°21'41"(R)	158.373
157	TP152	661278.428	2972622.306	88° 37' 24.570" E	26° 51' 57.467" N	36.60	46654.69	2°14'13"(R)	158.264
158	TP153	661247.424	2972641.765	88° 37' 23.456" E	26° 51' 58.112" N	218.62	46691.29	4°28'16"(R)	158.063
159	TP154	661071.880	2972772.062	88° 37' 17.157" E	26° 52' 2.418" N	119.46	46909.91	0°25'51"(R)	160.557
160	TP155	660976.494	2972843.981	88° 37' 13.735" E	26° 52' 4.795" N	407.15	47029.37	3°33'3"(R)	160.204
161	TP156	660667.200	2973108.764	88° 37' 2.652" E	26° 52' 13.526" N	679.60	47436.52	3°57'28"(L)	157.917
162	TP157	660121.663	2973514.044	88° 36' 43.074" E	26° 52' 26.920" N	46.94	48116.12	10°55'33"(L)	163.002
163	TP158	660079.359	2973534.388	88° 36' 41.551" E	26° 52' 27.598" N	51.33	48163.07	5°33'32"(L)	164.361
164	TP159	660031.166	2973552.047	88° 36' 39.813" E	26° 52' 28.192" N	329.31	48214.39	4°33'35"(L)	166.439
165	TP160	659713.936	2973640.406	88° 36' 28.360" E	26° 52' 31.193" N	62.77	48543.70	2°6'27"(L)	162.464
166	TP161	659652.890	2973655.013	88° 36' 26.155" E	26° 52' 31.693" N	30.27	48606.47	3°30'41"(L)	160.475
167	TP162	659623.074	2973660.241	88° 36' 25.078" E	26° 52' 31.875" N	265.11	48636.74	4°22'49"(L)	160.613
168	TP163	659359.217	2973685.949	88° 36' 15.530" E	26° 52' 32.819" N	109.31	48901.84	2°30'48"(L)	161.274
169	TP164	659250.066	2973691.768	88° 36' 11.578" E	26° 52' 33.053" N	12.80	49011.15	85°26'47"(R)	163.281
170	TP165	659246.657	2973704.102	88° 36' 11.460" E	26° 52' 33.455" N	87.85	49023.95	86°39'15"(L)	164.845
171	TP166	659163.494	2973675.797	88° 36' 8.434" E	26° 52' 32.570" N	147.37	49111.79	1°0'24"(L)	165.857
172	TP167	659024.839	2973625.871	88° 36' 3.387" E	26° 52' 31.005" N	106.05	49259.16	0°44'16"(L)	167.166
173	TP168	658925.535	2973588.663	88° 35' 59.773" E	26° 52' 29.837" N	56.16	49365.21	2°30'14"(L)	168.111
174	TP169	658873.857	2973566.680	88° 35' 57.890" E	26° 52' 29.143" N	112.14	49421.37	3°30'21"(R)	168.399
175	TP170	658768.176	2973529.177	88° 35' 54.044" E	26° 52' 27.968" N	113.56	49533.51	87°32'20"(R)	168.318
176	TP171	658725.636	2973634.471	88° 35' 52.551" E	26° 52' 31.407" N	57.02	49647.07	11°34'23"(L)	168.503
177	TP172	658694.104	2973681.980	88° 35' 51.430" E	26° 52' 32.963" N	56.93	49704.09	3°18'47"(L)	169.430
178	TP173	658665.414	2973731.157	88° 35' 50.413" E	26° 52' 34.573" N	183.88	49761.02	1°55'46"(L)	169.916
179	TP174	658567.457	2973886.777	88° 35' 46.935" E	26° 52' 39.669" N	96.77	49944.91	11°31'22"(L)	173.547
180	TP175	658500.584	2973956.727	88° 35' 44.544" E	26° 52' 41.969" N	78.52	50041.68	1°52'44"(L)	173.401
181	TP176	658448.216	2974015.230	88° 35' 42.674" E	26° 52' 43.892" N	128.42	50120.20	4°30'17"(L)	174.590
182	TP177	658355.318	2974103.889	88° 35' 39.348" E	26° 52' 46.810" N	136.74	50248.61	0°30'44"(L)	175.596
183	TP178	658255.560	2974197.405	88° 35' 35.776" E	26° 52' 49.889" N	40.70	50385.35	4°32'45"(L)	176.874
184	TP179	658223.757	2974222.797	88° 35' 34.636" E	26° 52' 50.727" N	87.22	50426.05	6°8'50"(L)	177.064
185	TP180	658150.159	2974269.607	88° 35' 31.990" E	26° 52' 52.278" N	118.40	50513.27	6°17'57"(L)	177.980
186	TP181	658043.889	2974321.802	88° 35' 28.164" E	26° 52' 54.018" N	85.25	50631.67	1°6'57"(L)	179.419
187	TP182	657966.651	2974357.888	88° 35' 25.381" E	26° 52' 55.222" N	131.71	50716.92	0°25'7"(R)	180.382
188	TP183	657847.736	2974414.508	88° 35' 21.098" E	26° 52' 57.110" N	119.29	50848.62	0°16'48"(L)	180.982
189	TP184	657739.781	2974465.264	88° 35' 17.210" E	26° 52' 58.803" N	230.52	50967.92	0°20'52"(R)	181.718
190	TP185	657531.769	2974564.609	88° 35' 9.718" E	26° 53' 2.115" N	185.23	51198.43	1°20'54"(L)	185.776
191	TP186	657362.789	2974640.482	88° 35' 3.630" E	26° 53' 4.649" N	108.99	51383.67	0°31'44"(L)	187.186
192	TP187	657262.958	2974684.204	88° 35' 0.032" E	26° 53' 6.110" N	301.91	51492.65	1°56'57"(R)	187.638
193	TP188	656990.687	2974814.659	88° 34' 50.226" E	26° 53' 10.459" N	62.87	51794.56	4°49'29"(R)	193.367
194	TP189	656936.474	2974846.498	88° 34' 48.276" E	26° 53' 11.516" N	108.45	51857.43	5°0'47"(R)	194.772
195	TP190	656848.118	2974909.379	88° 34' 45.103" E	26° 53' 13.595" N	55.99	51965.88	4°49'49"(R)	197.320
196	TP191	656805.395	2974945.571	88° 34' 43.571" E	26° 53' 14.788" N	26.57	52021.87	0°39'48"(R)	198.692
197	TP192	656785.318	2974962.982	88° 34' 42.851" E	26° 53' 15.362" N	146.22	52048.45	6°21'4"(R)	199.297
198	TP193	656686.124	2975070.415	88° 34' 39.305" E	26° 53' 18.893" N	114.81	52194.67	2°8'25"(R)	202.733

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
199	TP194	656611.446	2975157.616	88° 34' 36.639" E	26° 53' 21.756" N	79.37	52309.48	1°36'35"(R)	204.754
200	TP195	656561.533	2975219.327	88° 34' 34.858" E	26° 53' 23.781" N	137.33	52388.85	0°36'7"(L)	207.055
201	TP196	656474.057	2975325.186	88° 34' 31.736" E	26° 53' 27.256" N	79.15	52526.17	0°50'47"(L)	208.643
202	TP197	656422.743	2975385.448	88° 34' 29.904" E	26° 53' 29.235" N	82.71	52605.32	0°36'6"(L)	209.111
203	TP198	656368.465	2975447.851	88° 34' 27.965" E	26° 53' 31.284" N	92.13	52688.03	0°41'25"(L)	209.306
204	TP199	656307.170	2975516.630	88° 34' 25.775" E	26° 53' 33.544" N	43.01	52780.16	7°36'17"(L)	210.663
205	TP200	656274.557	2975544.670	88° 34' 24.606" E	26° 53' 34.468" N	32.60	52823.17	10°11'2"(L)	211.775
206	TP201	656246.469	2975561.218	88° 34' 23.595" E	26° 53' 35.017" N	49.75	52855.77	6°27'2"(L)	212.376
207	TP202	656201.041	2975581.495	88° 34' 21.958" E	26° 53' 35.694" N	83.62	52905.51	16°12'37"(L)	212.771
208	TP203	656118.201	2975592.907	88° 34' 18.961" E	26° 53' 36.098" N	186.67	52989.14	5°12'35"(L)	212.125
209	TP204	655931.727	2975601.485	88° 34' 12.208" E	26° 53' 36.452" N	37.69	53175.81	3°20'11"(R)	211.937
210	TP205	655894.243	2975605.405	88° 34' 10.852" E	26° 53' 36.595" N	60.54	53213.50	26°13'39"(R)	211.929
211	TP206	655843.017	2975637.661	88° 34' 9.010" E	26° 53' 37.663" N	42.50	53274.03	16°39'13"(R)	213.209
212	TP207	655815.052	2975669.663	88° 34' 8.011" E	26° 53' 38.714" N	38.22	53316.53	11°36'42"(L)	213.609
213	TP208	655784.623	2975692.793	88° 34' 6.918" E	26° 53' 39.478" N	18.74	53354.75	25°25'1"(L)	213.792
214	TP209	655766.283	2975696.632	88° 34' 6.256" E	26° 53' 39.610" N	112.76	53373.49	9°16'41"(L)	214.470
215	TP210	655653.637	2975701.638	88° 34' 2.176" E	26° 53' 39.818" N	117.02	53486.25	15°15'19"(L)	219.012
216	TP211	655539.483	2975675.890	88° 33' 58.028" E	26° 53' 39.028" N	41.65	53603.27	15°13'39"(R)	219.033
217	TP212	655497.874	2975677.719	88° 33' 56.521" E	26° 53' 39.104" N	13.82	53644.92	40°15'36"(R)	218.503
218	TP213	655487.732	2975687.103	88° 33' 56.157" E	26° 53' 39.413" N	16.15	53658.74	23°9'36"(R)	224.857
219	TP214	655481.149	2975701.845	88° 33' 55.925" E	26° 53' 39.894" N	25.88	53674.88	12°1'11"(R)	223.150
220	TP215	655475.750	2975727.151	88° 33' 55.741" E	26° 53' 40.719" N	66.31	53700.76	81°27'2"(R)	232.084
221	TP216	655537.821	2975750.473	88° 33' 58.001" E	26° 53' 41.451" N	68.17	53767.06	10°25'5"(R)	231.890
222	TP217	655604.923	2975762.516	88° 34' 0.438" E	26° 53' 41.816" N	41.82	53835.24	16°35'2"(L)	232.356
223	TP218	655642.267	2975781.346	88° 34' 1.800" E	26° 53' 42.413" N	45.42	53877.06	28°31'52"(L)	234.814
224	TP219	655668.133	2975818.687	88° 34' 2.754" E	26° 53' 43.615" N	22.13	53922.49	12°22'18"(R)	239.427
225	TP220	655684.337	2975833.754	88° 34' 3.348" E	26° 53' 44.098" N	75.71	53944.61	15°22'46"(R)	239.775
226	TP221	655751.470	2975868.759	88° 34' 5.796" E	26° 53' 45.209" N	19.06	54020.32	10°15'4"(R)	246.321
227	TP222	655769.668	2975874.423	88° 34' 6.458" E	26° 53' 45.386" N	20.70	54039.38	20°22'11"(R)	248.129
228	TP223	655790.338	2975873.310	88° 34' 7.207" E	26° 53' 45.341" N	46.18	54060.08	19°18'0"(L)	248.889
229	TP224	655834.675	2975886.206	88° 34' 8.819" E	26° 53' 45.742" N	3.77	54106.26	83°47'0"(L)	252.965
230	TP225	655834.020	2975889.921	88° 34' 8.797" E	26° 53' 45.863" N	21.61	54110.03	73°39'14"(L)	253.243
231	TP226	655813.604	2975882.843	88° 34' 8.054" E	26° 53' 45.641" N	49.22	54131.64	23°32'59"(R)	255.547
232	TP227	655764.526	2975886.645	88° 34' 6.277" E	26° 53' 45.785" N	43.29	54180.86	18°15'21"(L)	259.251
233	TP228	655722.486	2975876.299	88° 34' 4.749" E	26° 53' 45.465" N	15.13	54224.16	55°55'13"(R)	265.524
234	TP229	655711.258	2975886.443	88° 34' 4.347" E	26° 53' 45.800" N	10.43	54239.29	73°18'16"(R)	267.740
235	TP230	655715.733	2975895.868	88° 34' 4.513" E	26° 53' 46.104" N	43.34	54249.72	32°53'11"(R)	267.984
236	TP231	655752.602	2975918.652	88° 34' 5.859" E	26° 53' 46.829" N	13.01	54293.06	14°31'46"(R)	271.956
237	TP232	655765.028	2975922.495	88° 34' 6.312" E	26° 53' 46.949" N	32.14	54306.07	9°24'14"(R)	272.766
238	TP233	655796.875	2975926.847	88° 34' 7.468" E	26° 53' 47.078" N	8.39	54338.21	44°39'52"(L)	276.364
239	TP234	655801.990	2975933.500	88° 34' 7.656" E	26° 53' 47.292" N	100.21	54346.60	89°21'05"(L)	278.249
240	TP235	655701.782	2975933.585	88° 34' 4.025" E	26° 53' 47.335" N	39.32	54446.81	5°14'41"(R)	287.222
241	TP236	655662.634	2975937.212	88° 34' 2.608" E	26° 53' 47.469" N	48.73	54486.13	19°40'28"(L)	287.647
242	TP237	655615.433	2975925.109	88° 34' 0.892" E	26° 53' 47.094" N	18.77	54534.86	9°29'16"(R)	295.845
243	TP238	655596.728	2975923.508	88° 34' 0.213" E	26° 53' 47.050" N	112.78	54553.63	28°41'17"(R)	296.115
244	TP239	655493.536	2975969.010	88° 33' 56.494" E	26° 53' 48.570" N	110.27	54666.41	10°0'42"(R)	303.423
245	TP240	655401.910	2976030.362	88° 33' 53.201" E	26° 53' 50.600" N	30.53	54776.68	30°44'21"(L)	310.523
246	TP241	655371.426	2976031.996	88° 33' 52.097" E	26° 53' 50.665" N	59.90	54807.21	29°7'26"(L)	312.356
247	TP242	655317.610	2976005.682	88° 33' 50.135" E	26° 53' 49.832" N	44.17	54867.11	20°25'54"(R)	317.340
248	TP243	655273.651	2976001.353	88° 33' 48.540" E	26° 53' 49.709" N	64.83	54911.28	46°9'42"(R)	320.129
249	TP244	655224.379	2976043.489	88° 33' 46.774" E	26° 53' 51.098" N	25.56	54976.12	26°31'25"(R)	320.855
250	TP245	655214.417	2976067.027	88° 33' 46.423" E	26° 53' 51.867" N	10.88	55001.67	42°27'20"(R)	325.864
251	TP246	655218.051	2976077.280	88° 33' 46.559" E	26° 53' 52.198" N	20.21	55012.55	45°54'45"(R)	326.345
252	TP247	655236.429	2976085.683	88° 33' 47.229" E	26° 53' 52.464" N	74.15	55032.76	39°3'46"(R)	326.780
253	TP248	655308.217	2976067.129	88° 33' 49.822" E	26° 53' 51.832" N	37.88	55106.91	45°52'54"(L)	330.765
254	TP249	655340.549	2976086.857	88° 33' 51.003" E	26° 53' 52.460" N	88.23	55144.78	19°33'45"(R)	333.734
255	TP250	655426.907	2976104.942	88° 33' 54.140" E	26° 53' 53.013" N	54.95	55233.01	7°11'16"(R)	339.883
256	TP251	655481.672	2976109.387	88° 33' 56.127" E	26° 53' 53.136" N	65.90	55287.96	8°11'10"(R)	343.342
257	TP252	655547.449	2976105.311	88° 33' 58.509" E	26° 53' 52.977" N	44.80	55353.86	29°31'4"(R)	347.735
258	TP253	655584.995	2976080.869	88° 33' 59.858" E	26° 53' 52.167" N	14.02	55398.66	25°50'29"(L)	350.576
259	TP254	655598.905	2976079.106	88° 34' 0.362" E	26° 53' 52.105" N	20.52	55412.68	22°37'4"(L)	351.988
260	TP255	655618.689	2976084.554	88° 34' 1.081" E	26° 53' 52.274" N	17.81	55433.20	55°53'29"(L)	353.521
261	TP256	655624.403	2976101.422	88° 34' 1.296" E	26° 53' 52.819" N	45.28	55451.01	5°32'31"(L)	353.676
262	TP257	655634.720	2976145.508	88° 34' 1.689" E	26° 53' 54.248" N	62.45	55496.29	34°25'49"(L)	357.673
263	TP258	655612.076	2976203.710	88° 34' 0.895" E	26° 53' 56.148" N	14.95	55558.74	11°15'40"(R)	362.569
264	TP259	655609.480	2976218.436	88° 34' 0.807" E	26° 53' 56.627" N	53.10	55573.70	24°38'39"(R)	364.887

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
265	TP260	655622.907	2976269.812	88° 34' 1.317" E	26° 53' 58.291" N	19.23	55626.80	37°23'1"(L)	368.637
266	TP261	655615.475	2976287.546	88° 34' 1.056" E	26° 53' 58.870" N	23.76	55646.03	12°50'0"(R)	370.856
267	TP262	655611.389	2976310.949	88° 34' 0.918" E	26° 53' 59.632" N	48.15	55669.78	2°57'30"(L)	373.457
268	TP263	655600.671	2976357.891	88° 34' 0.551" E	26° 54' 1.162" N	21.31	55717.93	78°57'34"(L)	381.090
269	TP264	655579.372	2976357.214	88° 33' 59.779" E	26° 54' 1.149" N	71.10	55739.24	73°29'10"(L)	382.756
270	TP265	655561.340	2976288.443	88° 33' 59.094" E	26° 53' 58.921" N	18.57	55810.34	8°39'3"(L)	388.845
271	TP266	655559.386	2976269.981	88° 33' 59.015" E	26° 53' 58.322" N	42.96	55828.90	10°44'24"(L)	390.589
272	TP267	655562.905	2976227.164	88° 33' 59.124" E	26° 53' 56.930" N	41.00	55871.86	9°50'49"(L)	392.053
273	TP268	655573.201	2976187.482	88° 33' 59.479" E	26° 53' 55.636" N	14.23	55912.86	12°37'0"(R)	393.771
274	TP269	655573.680	2976173.258	88° 33' 59.490" E	26° 53' 55.174" N	8.69	55927.09	2°24'13"(R)	395.455
275	TP270	655573.608	2976164.570	88° 33' 59.483" E	26° 53' 54.892" N	10.49	55935.78	67°34'40"(R)	395.896
276	TP271	655563.880	2976160.650	88° 33' 59.129" E	26° 53' 54.768" N	36.98	55946.27	47°13'52"(R)	397.309
277	TP272	655530.443	2976176.444	88° 33' 57.924" E	26° 53' 55.295" N	30.24	55983.25	9°26'50"(L)	400.564
278	TP273	655501.352	2976184.696	88° 33' 56.874" E	26° 53' 55.575" N	5.54	56013.49	31°2'32"(R)	403.020
279	TP274	655497.563	2976188.742	88° 33' 56.738" E	26° 53' 55.708" N	23.07	56019.03	4°2'19"(R)	403.152
280	TP275	655483.017	2976206.652	88° 33' 56.219" E	26° 53' 56.295" N	19.66	56042.10	27°49'5"(L)	405.337
281	TP276	655464.929	2976214.367	88° 33' 55.567" E	26° 53' 56.553" N	15.15	56061.77	0°6'7"(R)	406.549
282	TP277	655451.001	2976220.337	88° 33' 55.065" E	26° 53' 56.753" N	6.95	56076.92	33°4'27"(R)	407.870
283	TP278	655447.144	2976226.115	88° 33' 54.928" E	26° 53' 56.942" N	12.87	56083.87	21°3'25"(R)	409.185
284	TP279	655444.321	2976238.675	88° 33' 54.831" E	26° 53' 57.351" N	28.28	56096.74	17°3'38"(L)	409.106
285	TP280	655430.297	2976263.234	88° 33' 54.334" E	26° 53' 58.155" N	15.31	56125.02	5°17'17"(L)	410.535
286	TP281	655421.514	2976275.770	88° 33' 54.021" E	26° 53' 58.566" N	18.95	56140.33	5°26'19"(R)	411.617
287	TP282	655412.158	2976292.255	88° 33' 53.690" E	26° 53' 59.105" N	7.62	56159.28	4°22'26"(R)	413.189
288	TP283	655408.912	2976299.152	88° 33' 53.575" E	26° 53' 59.331" N	22.05	56166.91	12°20'1"(L)	413.645
289	TP284	655395.475	2976316.640	88° 33' 53.096" E	26° 53' 59.904" N	4.29	56188.96	65°54'8"(R)	416.590
290	TP285	655395.231	2976320.923	88° 33' 53.089" E	26° 54' 0.043" N	4.72	56193.25	66°58'40"(R)	417.374
291	TP286	655399.463	2976323.013	88° 33' 53.244" E	26° 54' 0.110" N	31.56	56197.97	34°16'36"(R)	418.050
292	TP287	655423.772	2976302.889	88° 33' 54.115" E	26° 53' 59.446" N	17.81	56229.53	17°33'39"(L)	422.379
293	TP288	655433.423	2976287.925	88° 33' 54.458" E	26° 53' 58.956" N	55.75	56247.34	1°17'26"(L)	423.720
294	TP289	655462.579	2976240.401	88° 33' 55.494" E	26° 53' 57.400" N	9.25	56303.09	85°11'8"(L)	426.811
295	TP290	655470.844	2976244.561	88° 33' 55.795" E	26° 53' 57.532" N	14.82	56312.34	53°22'49"(R)	426.728
296	TP291	655484.090	2976237.909	88° 33' 56.272" E	26° 53' 57.310" N	12.17	56327.16	49°28'37"(L)	428.013
297	TP292	655495.312	2976242.629	88° 33' 56.681" E	26° 53' 57.459" N	18.56	56339.34	32°35'38"(L)	429.360
298	TP293	655505.848	2976257.905	88° 33' 57.070" E	26° 53' 57.951" N	40.09	56357.90	45°55'35"(L)	431.783
299	TP294	655497.970	2976297.216	88° 33' 56.802" E	26° 53' 59.232" N	32.40	56397.99	11°47'43"(L)	436.602
300	TP295	655485.245	2976327.010	88° 33' 56.354" E	26° 54' 0.205" N	9.79	56430.39	85°46'44"(R)	440.964
301	TP296	655493.940	2976331.507	88° 33' 56.671" E	26° 54' 0.348" N	28.33	56440.18	88°1'53"(L)	445.383
302	TP297	655481.799	2976357.100	88° 33' 56.243" E	26° 54' 1.184" N	21.75	56468.50	49°52'55"(L)	446.036
303	TP298	655460.762	2976362.634	88° 33' 55.483" E	26° 54' 1.372" N	9.75	56490.25	25°26'14"(R)	448.584
304	TP299	655453.310	2976368.926	88° 33' 55.215" E	26° 54' 1.580" N	63.16	56500.01	46°18'8"(R)	450.066
305	TP300	655449.430	2976431.965	88° 33' 55.103" E	26° 54' 3.630" N	8.17	56563.17	85°35'2"(L)	459.545
306	TP301	655441.257	2976432.093	88° 33' 54.807" E	26° 54' 3.637" N	10.02	56571.34	81°59'38"(R)	462.399
307	TP302	655440.017	2976442.031	88° 33' 54.766" E	26° 54' 3.960" N	16.05	56581.36	17°42'37"(L)	463.829
308	TP303	655433.281	2976456.594	88° 33' 54.529" E	26° 54' 4.436" N	5.45	56597.40	14°23'40"(R)	466.347
309	TP304	655432.294	2976461.957	88° 33' 54.496" E	26° 54' 4.611" N	25.15	56602.85	0°57'3"(R)	467.179
310	TP305	655427.332	2976486.613	88° 33' 54.327" E	26° 54' 5.414" N	18.48	56628.00	10°0'7"(R)	470.562
311	TP306	655426.888	2976505.088	88° 33' 54.319" E	26° 54' 6.014" N	13.34	56646.48	7°15'7"(R)	473.317
312	TP307	655428.253	2976518.353	88° 33' 54.374" E	26° 54' 6.445" N	34.73	56659.82	6°57'28"(R)	475.235
313	TP308	655435.967	2976552.216	88° 33' 54.669" E	26° 54' 7.542" N	18.70	56694.55	10°0'8"(R)	480.602
314	TP309	655443.224	2976569.450	88° 33' 54.940" E	26° 54' 8.099" N	61.20	56713.25	5°27'12"(R)	483.342
315	TP310	655472.229	2976623.344	88° 33' 56.015" E	26° 54' 9.838" N	36.01	56774.45	6°5'49"(R)	491.714
316	TP311	655492.567	2976653.063	88° 33' 56.765" E	26° 54' 10.796" N	15.21	56810.47	4°59'30"(R)	496.318
317	TP312	655500.718	2976665.905	88° 33' 57.067" E	26° 54' 11.210" N	25.41	56825.68	85°29'55"(L)	498.291
318	TP313	655480.403	2976681.161	88° 33' 56.337" E	26° 54' 11.714" N	16.59	56851.08	12°38'55"(R)	502.260
319	TP314	655469.640	2976693.787	88° 33' 55.953" E	26° 54' 12.128" N	33.29	56867.67	3°22'47"(L)	503.957
320	TP315	655446.588	2976717.804	88° 33' 55.128" E	26° 54' 12.918" N	32.95	56900.96	4°11'9"(L)	509.357
321	TP316	655422.096	2976739.848	88° 33' 54.250" E	26° 54' 13.644" N	17.23	56933.91	13°25'10"(R)	514.354
322	TP317	655412.312	2976754.035	88° 33' 53.902" E	26° 54' 14.109" N	8.84	56951.15	26°6'18"(R)	516.783
323	TP318	655411.008	2976762.774	88° 33' 53.859" E	26° 54' 14.393" N	18.28	56959.98	14°55'26"(R)	517.676
324	TP319	655413.057	2976780.935	88° 33' 53.941" E	26° 54' 14.983" N	20.60	56978.26	67°55'25"(L)	518.875
325	TP320	655394.957	2976790.768	88° 33' 53.290" E	26° 54' 15.309" N	49.30	56998.86	6°24'8"(R)	519.588
326	TP321	655354.534	2976818.984	88° 33' 51.837" E	26° 54' 16.242" N	54.48	57048.15	19°24'26"(R)	516.867
327	TP322	655322.762	2976863.237	88° 33' 50.706" E	26° 54' 17.693" N	36.70	57102.63	5°37'1"(L)	514.175
328	TP323	655298.541	2976890.813	88° 33' 49.840" E	26° 54' 18.599" N	20.03	57139.33	12°0'13"(L)	515.776
329	TP324	655282.482	2976902.784	88° 33' 49.264" E	26° 54' 18.994" N	20.01	57159.36	5°12'16"(R)	515.386
330	TP325	655267.590	2976916.149	88° 33' 48.730" E	26° 54' 19.434" N	16.96	57179.37	1°54'52"(L)	515.048

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S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
331	TP326	655254.594	2976927.051	88° 33' 48.264" E	26° 54' 19.794" N	66.13	57196.34	46°19'29"(R)	515.832
332	TP327	655250.346	2976993.047	88° 33' 48.140" E	26° 54' 21.940" N	160.60	57262.47	22°47'59"(R)	519.925
333	TP328	655302.941	2977144.788	88° 33' 50.114" E	26° 54' 26.849" N	43.90	57423.07	36°16'5"(R)	530.935
334	TP329	655339.069	2977169.725	88° 33' 51.434" E	26° 54' 27.645" N	29.25	57466.97	8°44'2"(L)	537.653
335	TP330	655360.340	2977189.804	88° 33' 52.214" E	26° 54' 28.288" N	21.97	57496.22	7°38'7"(L)	537.488
336	TP331	655374.170	2977206.873	88° 33' 52.723" E	26° 54' 28.837" N	20.68	57518.19	42°57'21"(L)	541.487
337	TP332	655372.749	2977227.504	88° 33' 52.681" E	26° 54' 29.508" N	8.32	57538.87	46°1'43"(L)	544.973
338	TP333	655366.379	2977232.855	88° 33' 52.452" E	26° 54' 29.685" N	33.93	57547.18	30°36'15"(L)	546.390
339	TP334	655332.904	2977238.413	88° 33' 51.241" E	26° 54' 29.879" N	50.64	57581.12	12°36'16"(L)	550.637
340	TP335	655282.341	2977235.606	88° 33' 49.408" E	26° 54' 29.808" N	36.76	57631.76	23°40'27"(R)	557.470
341	TP336	655247.907	2977248.478	88° 33' 48.165" E	26° 54' 30.240" N	36.64	57668.52	24°40'37"(R)	561.885
342	TP337	655222.078	2977274.464	88° 33' 47.241" E	26° 54' 31.095" N	44.35	57705.16	8°49'15"(L)	565.011
343	TP338	655186.359	2977300.753	88° 33' 45.958" E	26° 54' 31.963" N	37.11	57749.51	22°25'20"(R)	570.385
344	TP339	655167.122	2977332.486	88° 33' 45.275" E	26° 54' 33.002" N	105.24	57786.62	19°27'17"(R)	573.962
345	TP340	655145.655	2977435.511	88° 33' 44.543" E	26° 54' 36.358" N	22.33	57891.86	3°41'35"(R)	580.222
346	TP341	655142.518	2977457.616	88° 33' 44.440" E	26° 54' 37.077" N	82.06	57914.18	12°15'55"(L)	579.915
347	TP342	655113.991	2977534.559	88° 33' 43.440" E	26° 54' 39.589" N	106.69	57996.24	6°50'48"(R)	584.102
348	TP343	655089.091	2977638.307	88° 33' 42.584" E	26° 54' 42.970" N	75.78	58102.94	15°8'21"(R)	587.352
349	TP344	655091.264	2977714.052	88° 33' 42.697" E	26° 54' 45.430" N	28.92	58178.71	19°59'42"(L)	589.953
350	TP345	655082.160	2977741.497	88° 33' 42.379" E	26° 54' 46.325" N	9.48	58207.63	40°19'57"(R)	592.125
351	TP346	655085.710	2977750.292	88° 33' 42.512" E	26° 54' 46.610" N	34.99	58217.11	16°55'58"(L)	592.392
352	TP347	655088.789	2977785.148	88° 33' 42.639" E	26° 54' 47.741" N	13.88	58252.11	30°7'34"(R)	592.236
353	TP348	655096.787	2977796.497	88° 33' 42.934" E	26° 54' 48.106" N	29.36	58265.99	4°54'41"(R)	593.312
354	TP349	655115.693	2977818.960	88° 33' 43.629" E	26° 54' 48.829" N	65.51	58295.35	15°18'24"(L)	594.444
355	TP350	655143.148	2977878.435	88° 33' 44.651" E	26° 54' 50.750" N	26.90	58360.86	39°59'46"(R)	596.077
356	TP351	655167.485	2977889.900	88° 33' 45.538" E	26° 54' 51.113" N	23.30	58387.76	0°57'35"(L)	595.869
357	TP352	655188.391	2977900.180	88° 33' 46.300" E	26° 54' 51.438" N	10.96	58411.05	34°57'27"(L)	596.806
358	TP353	655193.682	2977909.782	88° 33' 46.496" E	26° 54' 51.748" N	49.02	58422.02	36°47'55"(L)	596.075
359	TP354	655186.910	2977958.329	88° 33' 46.273" E	26° 54' 53.328" N	19.58	58471.04	17°53'16"(L)	597.886
360	TP355	655178.381	2977975.950	88° 33' 45.971" E	26° 54' 53.904" N	30.73	58490.61	35°31'48"(L)	599.841
361	TP356	655151.416	2977990.678	88° 33' 45.001" E	26° 54' 54.394" N	17.96	58521.34	4°57'15"(R)	602.537
362	TP357	655136.455	2978000.616	88° 33' 44.463" E	26° 54' 54.723" N	8.83	58539.30	2°56'27"(R)	605.440
363	TP358	655129.360	2978005.873	88° 33' 44.208" E	26° 54' 54.896" N	16.22	58548.13	37°52'35"(R)	606.438
364	TP359	655125.002	2978021.495	88° 33' 44.057" E	26° 54' 55.405" N	27.28	58564.35	7°20'19"(R)	607.083
365	TP360	655121.088	2978048.494	88° 33' 43.927" E	26° 54' 56.284" N	12.92	58591.63	26°45'59"(R)	611.206
366	TP361	655125.191	2978060.744	88° 33' 44.081" E	26° 54' 56.681" N	12.11	58604.55	11°0'27"(R)	610.509
367	TP362	655131.157	2978071.278	88° 33' 44.302" E	26° 54' 57.021" N	20.16	58616.65	13°51'38"(L)	611.120
368	TP363	655136.600	2978090.688	88° 33' 44.508" E	26° 54' 57.649" N	38.72	58636.81	45°33'38"(R)	611.875
369	TP364	655170.536	2978109.325	88° 33' 45.747" E	26° 54' 58.241" N	16.30	58675.53	22°13'1"(L)	613.495
370	TP365	655180.795	2978121.990	88° 33' 46.124" E	26° 54' 58.648" N	31.08	58691.83	31°8'6"(L)	614.562
371	TP366	655185.052	2978152.773	88° 33' 46.292" E	26° 54' 59.647" N	12.65	58722.90	12°45'58"(L)	617.245
372	TP367	655183.973	2978165.378	88° 33' 46.259" E	26° 55' 0.057" N	9.05	58735.55	37°48'37"(L)	620.437
373	TP368	655177.835	2978172.029	88° 33' 46.039" E	26° 55' 0.275" N	27.83	58744.60	1°35'48"(L)	621.341
374	TP369	655158.401	2978191.944	88° 33' 45.344" E	26° 55' 0.930" N	30.18	58772.43	48°44'27"(L)	623.718
375	TP370	655128.259	2978190.343	88° 33' 44.251" E	26° 55' 0.890" N	17.14	58802.62	23°1'2"(L)	626.095
376	TP371	655112.857	2978182.812	88° 33' 43.689" E	26° 55' 0.652" N	27.58	58819.76	10°28'14"(R)	626.867
377	TP372	655086.292	2978175.401	88° 33' 42.723" E	26° 55' 0.422" N	36.10	58847.34	23°39'0"(R)	628.204
378	TP373	655050.551	2978180.464	88° 33' 41.430" E	26° 55' 0.600" N	12.67	58883.44	17°4'7"(R)	630.696
379	TP374	655039.078	2978185.846	88° 33' 41.016" E	26° 55' 0.780" N	13.25	58896.11	27°34'12"(R)	631.240
380	TP375	655031.046	2978196.390	88° 33' 40.730" E	26° 55' 1.126" N	17.81	58909.36	16°55'13"(R)	631.815
381	TP376	655024.844	2978213.086	88° 33' 40.513" E	26° 55' 1.671" N	13.50	58927.18	0°4'42"(L)	632.347
382	TP377	655020.126	2978225.734	88° 33' 40.347" E	26° 55' 2.084" N	46.05	58940.67	9°32'0"(L)	633.317
383	TP378	654997.106	2978265.622	88° 33' 39.531" E	26° 55' 3.389" N	40.20	58986.73	5°15'14"(R)	635.056
384	TP379	654980.285	2978302.133	88° 33' 38.937" E	26° 55' 4.582" N	11.60	59026.93	13°40'28"(L)	638.214
385	TP380	654973.080	2978311.220	88° 33' 38.680" E	26° 55' 4.880" N	12.24	59038.53	22°25'45"(R)	638.377
386	TP381	654969.710	2978322.987	88° 33' 38.563" E	26° 55' 5.264" N	34.88	59050.77	20°59'10"(R)	638.676
387	TP382	654972.753	2978357.736	88° 33' 38.689" E	26° 55' 6.391" N	15.87	59085.65	25°26'49"(R)	640.702
388	TP383	654980.795	2978371.415	88° 33' 38.987" E	26° 55' 6.833" N	23.44	59101.51	4°13'54"(R)	641.720
389	TP384	654994.134	2978390.691	88° 33' 39.479" E	26° 55' 7.454" N	19.47	59124.96	18°51'5"(L)	643.123
390	TP385	654999.447	2978409.427	88° 33' 39.680" E	26° 55' 8.060" N	23.35	59144.43	45°30'8"(L)	642.270
391	TP386	654987.890	2978429.713	88° 33' 39.270" E	26° 55' 8.724" N	10.95	59167.78	7°29'15"(L)	644.445
392	TP387	654981.279	2978438.436	88° 33' 39.034" E	26° 55' 9.010" N	23.65	59178.72	46°2'1"(L)	642.736
393	TP388	654957.794	2978441.240	88° 33' 38.184" E	26° 55' 9.111" N	52.76	59202.38	18°53'8"(L)	644.826
394	TP389	654906.205	2978430.202	88° 33' 36.310" E	26° 55' 8.773" N	32.47	59255.13	23°29'8"(R)	647.178
395	TP390	654874.380	2978436.624	88° 33' 35.159" E	26° 55' 8.994" N	12.51	59287.60	21°46'16"(R)	648.003
396	TP391	654863.907	2978443.472	88° 33' 34.782" E	26° 55' 9.221" N	47.26	59300.11	18°54'32"(R)	648.312

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
397	TP392	654834.867	2978480.760	88° 33' 33.746" E	26° 55' 10.444" N	46.65	59347.37	9°48'35"(L)	652.025
398	TP393	654800.354	2978512.141	88° 33' 32.510" E	26° 55' 11.477" N	23.15	59394.02	8°9'59"(R)	654.860
399	TP394	654785.610	2978529.992	88° 33' 31.983" E	26° 55' 12.063" N	19.74	59417.17	3°13'49"(R)	655.695
400	TP395	654773.917	2978545.896	88° 33' 31.566" E	26° 55' 12.585" N	18.65	59436.91	11°49'3"(R)	656.978
401	TP396	654766.182	2978562.862	88° 33' 31.294" E	26° 55' 13.139" N	20.32	59455.56	10°31'5"(R)	658.551
402	TP397	654761.271	2978582.576	88° 33' 31.124" E	26° 55' 13.781" N	28.72	59475.88	5°38'59"(R)	659.667
403	TP398	654757.105	2978610.994	88° 33' 30.986" E	26° 55' 14.706" N	9.53	59504.60	48°19'44"(L)	660.435
404	TP399	654749.144	2978616.230	88° 33' 30.700" E	26° 55' 14.880" N	10.46	59514.13	36°11'49"(L)	660.474
405	TP400	654738.699	2978615.708	88° 33' 30.321" E	26° 55' 14.867" N	7.34	59524.58	31°33'48"(R)	660.845
406	TP401	654732.263	2978619.231	88° 33' 30.089" E	26° 55' 14.984" N	8.06	59531.92	34°9'43"(R)	660.252
407	TP402	654728.584	2978626.407	88° 33' 29.959" E	26° 55' 15.219" N	8.21	59539.99	23°51'14"(R)	660.567
408	TP403	654728.114	2978634.598	88° 33' 29.946" E	26° 55' 15.485" N	30.26	59548.19	9°43'36"(L)	660.867
409	TP404	654721.301	2978664.079	88° 33' 29.712" E	26° 55' 16.446" N	71.23	59578.45	24°16'44"(R)	661.245
410	TP405	654735.218	2978733.935	88° 33' 30.248" E	26° 55' 18.710" N	18.04	59649.68	25°47'0"(L)	662.444
411	TP406	654730.696	2978751.398	88° 33' 30.092" E	26° 55' 19.279" N	28.31	59667.72	7°8'17"(R)	662.455
412	TP407	654727.060	2978779.474	88° 33' 29.972" E	26° 55' 20.193" N	42.22	59696.03	10°34'5"(L)	662.355
413	TP408	654714.051	2978819.639	88° 33' 29.519" E	26° 55' 21.503" N	17.64	59738.25	18°20'11"(R)	663.547
414	TP409	654714.171	2978837.281	88° 33' 29.531" E	26° 55' 22.076" N	23.58	59755.89	7°31'11"(L)	664.854
415	TP410	654711.244	2978860.680	88° 33' 29.435" E	26° 55' 22.837" N	13.95	59779.47	23°36'15"(R)	665.534
416	TP411	654715.199	2978874.053	88° 33' 29.585" E	26° 55' 23.270" N	11.63	59793.41	16°5'18"(R)	666.651
417	TP412	654721.460	2978883.857	88° 33' 29.816" E	26° 55' 23.586" N	27.13	59805.05	24°16'20"(L)	666.987
418	TP413	654725.372	2978910.706	88° 33' 29.970" E	26° 55' 24.457" N	26.57	59832.18	21°4'14"(R)	668.355
419	TP414	654719.494	2978936.622	88° 33' 29.768" E	26° 55' 25.302" N	23.33	59858.75	19°19'12"(L)	669.039
420	TP415	654707.095	2978956.387	88° 33' 29.328" E	26° 55' 25.949" N	13.88	59882.09	8°31'52"(R)	669.377
421	TP416	654701.545	2978969.108	88° 33' 29.132" E	26° 55' 26.364" N	7.50	59895.96	20°57'37"(R)	669.691
422	TP417	654701.204	2978976.602	88° 33' 29.123" E	26° 55' 26.608" N	26.35	59903.47	3°21'50"(R)	668.971
423	TP418	654701.551	2979002.954	88° 33' 29.147" E	26° 55' 27.464" N	29.10	59929.82	0°28'5"(R)	664.820
424	TP419	654702.172	2979032.046	88° 33' 29.183" E	26° 55' 28.409" N	25.39	59958.92	4°50'26"(R)	661.732
425	TP420	654704.854	2979057.295	88° 33' 29.291" E	26° 55' 29.228" N	30.46	59984.31	6°35'23"(R)	660.575
426	TP421	654711.527	2979087.019	88° 33' 29.547" E	26° 55' 30.191" N	16.29	60014.77	7°48'33"(R)	658.553
427	TP422	654717.221	2979102.279	88° 33' 29.760" E	26° 55' 30.685" N	16.47	60031.06	12°31'8"(R)	657.547
428	TP423	654726.188	2979116.097	88° 33' 30.091" E	26° 55' 31.130" N	18.71	60047.53	1°31'59"(R)	656.368
429	TP424	654735.952	2979132.063	88° 33' 30.452" E	26° 55' 31.645" N	17.20	60066.25	11°21'24"(R)	655.205
430	TP425	654747.642	2979144.685	88° 33' 30.881" E	26° 55' 32.050" N	29.42	60083.45	14°8'53"(R)	653.756
431	TP426	654772.303	2979160.729	88° 33' 31.782" E	26° 55' 32.562" N	58.03	60112.87	5°48'26"(R)	651.765
432	TP427	654823.900	2979187.292	88° 33' 33.665" E	26° 55' 33.404" N	89.88	60170.91	1°59'37"(R)	647.733
433	TP428	654905.199	2979225.629	88° 33' 36.629" E	26° 55' 34.617" N	70.80	60260.79	3°25'2"(R)	641.431
434	TP429	654970.926	2979251.957	88° 33' 39.023" E	26° 55' 35.446" N	35.48	60331.60	0°47'0"(R)	636.815
435	TP430	655003.676	2979265.598	88° 33' 40.216" E	26° 55' 35.877" N	17.05	60367.07	15°7'52"(R)	634.700
436	TP431	655020.582	2979267.818	88° 33' 40.830" E	26° 55' 35.942" N	21.96	60384.12	31°12'59"(R)	633.546
437	TP432	655040.684	2979258.980	88° 33' 41.555" E	26° 55' 35.647" N	26.23	60406.08	28°14'3"(L)	631.112
438	TP433	655066.829	2979261.037	88° 33' 42.503" E	26° 55' 35.703" N	8.48	60432.31	47°24'30"(L)	629.245
439	TP434	655072.062	2979267.713	88° 33' 42.696" E	26° 55' 35.918" N	12.95	60440.79	87°43'46"(L)	628.615
440	TP435	655062.191	2979276.103	88° 33' 42.342" E	26° 55' 36.194" N	6.66	60453.75	6°6'27"(L)	628.110
441	TP436	655056.687	2979279.851	88° 33' 42.144" E	26° 55' 36.318" N	8.79	60460.41	30°27'14"(L)	626.456
442	TP437	655047.921	2979280.433	88° 33' 41.826" E	26° 55' 36.341" N	23.89	60469.19	16°1'46"(R)	626.255
443	TP438	655025.449	2979288.537	88° 33' 41.016" E	26° 55' 36.613" N	15.67	60493.08	14°14'22"(L)	624.975
444	TP439	655009.855	2979290.064	88° 33' 40.451" E	26° 55' 36.669" N	50.32	60508.75	27°51'44"(L)	621.477
445	TP440	654963.288	2979270.993	88° 33' 38.754" E	26° 55' 36.068" N	17.60	60559.07	30°41'29"(R)	621.149
446	TP441	654945.879	2979273.570	88° 33' 38.125" E	26° 55' 36.159" N	48.03	60576.67	29°11'58"(R)	619.778
447	TP442	654907.836	2979302.888	88° 33' 36.759" E	26° 55' 37.127" N	61.56	60624.70	31°23'43"(R)	613.456
448	TP443	654885.789	2979360.369	88° 33' 35.985" E	26° 55' 39.003" N	30.75	60686.26	36°9'39"(R)	612.685
449	TP444	654893.839	2979390.048	88° 33' 36.290" E	26° 55' 39.964" N	29.85	60717.01	11°24'21"(R)	610.877
450	TP445	654907.196	2979416.741	88° 33' 36.786" E	26° 55' 40.826" N	28.51	60746.86	11°4'56"(R)	608.544
451	TP446	654924.618	2979439.312	88° 33' 37.428" E	26° 55' 41.552" N	22.32	60775.37	10°38'51"(L)	607.202
452	TP447	654934.758	2979459.199	88° 33' 37.805" E	26° 55' 42.194" N	17.69	60797.70	31°8'12"(L)	605.011
453	TP448	654933.487	2979476.844	88° 33' 37.766" E	26° 55' 42.768" N	19.67	60815.39	16°31'16"(L)	603.517
454	TP449	654926.552	2979495.254	88° 33' 37.523" E	26° 55' 43.369" N	20.64	60835.06	13°24'27"(L)	601.399
455	TP450	654914.994	2979512.358	88° 33' 37.112" E	26° 55' 43.930" N	79.06	60855.70	29°11'11"(L)	599.477
456	TP451	654844.400	2979547.963	88° 33' 34.569" E	26° 55' 45.115" N	22.43	60934.77	0°17'32"(R)	589.089
457	TP452	654824.321	2979557.962	88° 33' 33.845" E	26° 55' 45.448" N	75.47	60957.20	40°22'15"(R)	587.938
458	TP453	654794.643	2979627.351	88° 33' 32.801" E	26° 55' 47.714" N	139.10	61032.67	9°22'40"(R)	587.563
459	TP454	654761.513	2979762.446	88° 33' 31.660" E	26° 55' 52.117" N	35.53	61171.77	16°26'20"(R)	593.454
460	TP455	654763.162	2979797.942	88° 33' 31.736" E	26° 55' 53.269" N	15.74	61207.30	15°52'42"(R)	594.788
461	TP456	654768.166	2979812.863	88° 33' 31.924" E	26° 55' 53.752" N	23.81	61223.04	23°33'30"(R)	595.543
462	TP457	654784.127	2979830.530	88° 33' 32.510" E	26° 55' 54.320" N	14.59	61246.85	49°25'9"(R)	595.322

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S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
463	TP458	654798.714	2979830.144	88° 33' 33.039" E	26° 55' 54.301" N	17.37	61261.44	6°22'22"(R)	594.785
464	TP459	654815.917	2979827.760	88° 33' 33.661" E	26° 55' 54.217" N	7.51	61278.81	27°57'7"(L)	594.611
465	TP460	654822.973	2979830.337	88° 33' 33.918" E	26° 55' 54.298" N	9.49	61286.32	29°50'16"(L)	593.888
466	TP461	654829.086	2979837.597	88° 33' 34.143" E	26° 55' 54.531" N	14.81	61295.81	5°35'26"(L)	594.845
467	TP462	654837.479	2979849.805	88° 33' 34.453" E	26° 55' 54.925" N	24.05	61310.62	39°31'45"(R)	596.572
468	TP463	654860.603	2979856.419	88° 33' 35.294" E	26° 55' 55.130" N	32.06	61334.68	27°8'56"(R)	598.012
469	TP464	654892.053	2979850.199	88° 33' 36.431" E	26° 55' 54.916" N	17.18	61366.73	11°32'31"(L)	600.223
470	TP465	654909.233	2979850.306	88° 33' 37.054" E	26° 55' 54.912" N	8.68	61383.91	22°45'54"(L)	600.877
471	TP466	654917.217	2979853.715	88° 33' 37.345" E	26° 55' 55.020" N	9.10	61392.60	31°17'41"(L)	601.244
472	TP467	654922.510	2979861.112	88° 33' 37.540" E	26° 55' 55.258" N	7.50	61401.69	46°5'1"(L)	602.234
473	TP468	654921.144	2979868.486	88° 33' 37.494" E	26° 55' 55.498" N	96.39	61409.19	49°56'28"(L)	602.457
474	TP469	654837.296	2979916.040	88° 33' 34.476" E	26° 55' 57.077" N	27.68	61505.58	17°4'31"(R)	607.541
475	TP470	654818.292	2979936.160	88° 33' 33.796" E	26° 55' 57.738" N	21.15	61533.26	30°24'7"(R)	608.996
476	TP471	654813.547	2979956.773	88° 33' 33.633" E	26° 55' 58.410" N	28.69	61554.41	17°2'59"(R)	609.654
477	TP472	654815.592	2979985.393	88° 33' 33.720" E	26° 55' 59.339" N	20.18	61583.11	21°16'29"(R)	611.122
478	TP473	654824.235	2980003.627	88° 33' 34.042" E	26° 55' 59.928" N	59.40	61603.29	14°35'46"(R)	611.575
479	TP474	654862.381	2980049.158	88° 33' 35.445" E	26° 56' 1.392" N	12.90	61662.68	22°50'57"(L)	613.875
480	TP475	654866.177	2980061.491	88° 33' 35.588" E	26° 56' 1.791" N	15.22	61675.59	56°13'0"(L)	614.544
481	TP476	654856.578	2980073.299	88° 33' 35.245" E	26° 56' 2.179" N	14.30	61690.81	62°33'48"(L)	618.075
482	TP477	654842.574	2980070.406	88° 33' 34.736" E	26° 56' 2.090" N	13.67	61705.11	5°5'0"(L)	619.480
483	TP478	654829.484	2980066.465	88° 33' 34.260" E	26° 56' 1.967" N	30.68	61718.78	19°4'38"(R)	619.594
484	TP479	654798.828	2980067.708	88° 33' 33.149" E	26° 56' 2.020" N	19.69	61749.46	63°30'55"(R)	621.566
485	TP480	654790.770	2980085.669	88° 33' 32.865" E	26° 56' 2.607" N	20.31	61769.14	19°20'9"(R)	622.195
486	TP481	654789.061	2980105.907	88° 33' 32.812" E	26° 56' 3.265" N	16.38	61789.45	23°59'32"(R)	624.038
487	TP482	654794.437	2980121.375	88° 33' 33.014" E	26° 56' 3.766" N	19.66	61805.83	3°3'12"(R)	624.444
488	TP483	654801.872	2980139.577	88° 33' 33.292" E	26° 56' 4.354" N	9.46	61825.49	8°18'37"(L)	625.386
489	TP484	654804.145	2980148.756	88° 33' 33.378" E	26° 56' 4.651" N	12.49	61834.95	32°48'17"(L)	626.085
490	TP485	654800.100	2980160.573	88° 33' 33.237" E	26° 56' 5.037" N	6.65	61847.44	51°18'30"(L)	626.945
491	TP486	654793.846	2980162.824	88° 33' 33.011" E	26° 56' 5.113" N	23.85	61854.08	7°26'20"(L)	627.508
492	TP487	654770.547	2980167.928	88° 33' 32.169" E	26° 56' 5.288" N	12.84	61877.93	17°24'23"(R)	629.227
493	TP488	654759.397	2980174.304	88° 33' 31.767" E	26° 56' 5.499" N	7.79	61890.78	2°30'0"(R)	629.879
494	TP489	654752.807	2980178.464	88° 33' 31.530" E	26° 56' 5.637" N	9.25	61898.57	20°7'36"(R)	630.220
495	TP490	654747.163	2980185.790	88° 33' 31.329" E	26° 56' 5.877" N	32.97	61907.82	18°48'2"(R)	630.691
496	TP491	654736.531	2980217.003	88° 33' 30.958" E	26° 56' 6.896" N	13.10	61940.79	4°32'24"(L)	632.178
497	TP492	654731.338	2980229.032	88° 33' 30.775" E	26° 56' 7.289" N	10.04	61953.90	27°7'14"(L)	632.712
498	TP493	654723.598	2980235.419	88° 33' 30.497" E	26° 56' 7.499" N	5.10	61963.93	32°29'31"(L)	633.296
499	TP494	654718.535	2980236.044	88° 33' 30.314" E	26° 56' 7.522" N	31.64	61969.03	23°33'19"(L)	633.862
500	TP495	654688.200	2980227.048	88° 33' 29.210" E	26° 56' 7.242" N	12.36	62000.67	3°58'25"(R)	636.378
501	TP496	654676.133	2980224.363	88° 33' 28.771" E	26° 56' 7.159" N	21.88	62013.04	36°24'8"(R)	637.109
502	TP497	654656.122	2980233.213	88° 33' 28.050" E	26° 56' 7.455" N	25.69	62034.92	50°11'23"(R)	638.092
503	TP498	654649.061	2980257.915	88° 33' 27.805" E	26° 56' 8.260" N	10.98	62060.61	38°31'52"(L)	638.905
504	TP499	654640.122	2980264.295	88° 33' 27.484" E	26° 56' 8.471" N	23.95	62071.59	55°27'3"(L)	639.065
505	TP500	654617.606	2980256.129	88° 33' 26.664" E	26° 56' 8.215" N	21.78	62095.54	7°54'31"(L)	640.721
506	TP501	654598.350	2980245.958	88° 33' 25.961" E	26° 56' 7.892" N	21.26	62117.32	8°22'29"(R)	641.710
507	TP502	654578.310	2980238.874	88° 33' 25.232" E	26° 56' 7.670" N	23.13	62138.57	15°50'37"(R)	642.417
508	TP503	654555.230	2980237.412	88° 33' 24.394" E	26° 56' 7.632" N	20.43	62161.70	8°21'39"(R)	643.073
509	TP504	654534.869	2980239.099	88° 33' 23.657" E	26° 56' 7.694" N	16.36	62182.13	17°50'53"(R)	643.914
510	TP505	654519.766	2980245.381	88° 33' 23.112" E	26° 56' 7.905" N	29.45	62198.49	36°21'46"(R)	644.228
511	TP506	654504.577	2980270.607	88° 33' 22.573" E	26° 56' 8.730" N	15.11	62227.93	9°12'1"(R)	645.445
512	TP507	654498.954	2980284.629	88° 33' 22.375" E	26° 56' 9.188" N	85.94	62243.04	2°37'44"(R)	646.786
513	TP508	654470.658	2980365.777	88° 33' 21.386" E	26° 56' 11.836" N	35.96	62328.98	5°11'48"(R)	648.180
514	TP509	654461.943	2980400.662	88° 33' 21.086" E	26° 56' 12.973" N	20.76	62364.94	13°30'18"(L)	648.309
515	TP510	654452.347	2980419.071	88° 33' 20.746" E	26° 56' 13.575" N	21.64	62385.70	11°23'35"(L)	647.946
516	TP511	654438.751	2980435.906	88° 33' 20.261" E	26° 56' 14.127" N	44.69	62407.34	10°21'10"(R)	647.841
517	TP512	654417.379	2980475.151	88° 33' 19.503" E	26° 56' 15.411" N	25.83	62452.02	52°34'54"(R)	648.976
518	TP513	654427.890	2980498.748	88° 33' 19.895" E	26° 56' 16.174" N	25.03	62477.86	61°10'19"(R)	647.109
519	TP514	654452.828	2980500.850	88° 33' 20.800" E	26° 56' 16.232" N	13.35	62502.88	22°54'16"(L)	646.839
520	TP515	654464.647	2980507.061	88° 33' 21.231" E	26° 56' 16.429" N	95.86	62516.23	16°24'25"(L)	647.002
521	TP516	654533.454	2980573.808	88° 33' 23.755" E	26° 56' 18.570" N	11.57	62612.10	27°26'2"(R)	651.192
522	TP517	654544.532	2980577.131	88° 33' 24.158" E	26° 56' 18.674" N	36.35	62623.66	32°54'13"(R)	650.787
523	TP518	654579.442	2980566.983	88° 33' 25.419" E	26° 56' 18.330" N	13.90	62660.02	66°34'25"(R)	654.355
524	TP519	654581.189	2980553.189	88° 33' 25.476" E	26° 56' 17.881" N	38.56	62673.92	33°31'12"(R)	654.652
525	TP520	654564.102	2980518.619	88° 33' 24.842" E	26° 56' 16.765" N	47.40	62712.48	5°52'29"(L)	655.578
526	TP521	654547.558	2980474.198	88° 33' 24.222" E	26° 56' 15.328" N	23.44	62759.89	34°38'33"(L)	657.825
527	TP522	654553.313	2980451.480	88° 33' 24.421" E	26° 56' 14.588" N	21.83	62783.32	6°9'30"(R)	659.926
528	TP523	654556.372	2980429.870	88° 33' 24.522" E	26° 56' 13.884" N	7.24	62805.15	9°26'3"(L)	661.260

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
529	TP524	654558.547	2980422.968	88° 33' 24.598" E	26° 56' 13.659" N	7.90	62812.38	26°49'55"(L)	661.515
530	TP525	654564.065	2980417.318	88° 33' 24.795" E	26° 56' 13.473" N	6.37	62820.28	40°7'27"(L)	662.282
531	TP526	654570.401	2980416.702	88° 33' 25.024" E	26° 56' 13.451" N	3.09	62826.65	46°22'33"(L)	662.745
532	TP527	654572.737	2980418.720	88° 33' 25.110" E	26° 56' 13.515" N	13.71	62829.73	24°19'13"(L)	662.903
533	TP528	654578.501	2980431.162	88° 33' 25.325" E	26° 56' 13.917" N	44.05	62843.45	7°28'40"(L)	663.444
534	TP529	654591.659	2980473.203	88° 33' 25.820" E	26° 56' 15.278" N	8.28	62887.50	17°12'14"(R)	666.590
535	TP530	654596.356	2980480.016	88° 33' 25.994" E	26° 56' 15.498" N	7.78	62895.77	21°58'28"(L)	666.894
536	TP531	654598.054	2980487.607	88° 33' 26.059" E	26° 56' 15.744" N	12.31	62903.55	29°39'46"(R)	667.419
537	TP532	654606.337	2980496.719	88° 33' 26.363" E	26° 56' 16.036" N	40.88	62915.87	5°55'47"(R)	668.466
538	TP533	654636.809	2980523.963	88° 33' 27.480" E	26° 56' 16.909" N	14.57	62956.74	10°33'19"(R)	671.102
539	TP534	654649.269	2980531.522	88° 33' 27.935" E	26° 56' 17.150" N	10.48	62971.31	50°54'26"(L)	671.363
540	TP535	654650.700	2980541.903	88° 33' 27.991" E	26° 56' 17.487" N	15.28	62981.79	21°9'27"(L)	672.325
541	TP536	654647.182	2980556.776	88° 33' 27.870" E	26° 56' 17.971" N	22.81	62997.08	16°49'31"(R)	672.705
542	TP537	654648.581	2980579.539	88° 33' 27.931" E	26° 56' 18.710" N	7.20	63019.88	5°37'43"(R)	673.453
543	TP538	654649.725	2980586.645	88° 33' 27.976" E	26° 56' 18.941" N	20.43	63027.08	6°51'12"(R)	673.571
544	TP539	654655.356	2980606.284	88° 33' 28.189" E	26° 56' 19.577" N	29.03	63047.51	27°24'56"(L)	674.750
545	TP540	654649.609	2980634.743	88° 33' 27.993" E	26° 56' 20.503" N	13.01	63076.54	32°0'15"(L)	676.668
546	TP541	654640.667	2980644.192	88° 33' 27.673" E	26° 56' 20.814" N	16.66	63089.55	124°18'7"(L)	678.502
547	TP542	654637.124	2980627.911	88° 33' 27.538" E	26° 56' 20.287" N	21.53	63106.22	25°22'44"(L)	679.666
548	TP543	654642.005	2980606.939	88° 33' 27.705" E	26° 56' 19.603" N	14.10	63127.75	30°34'32"(R)	681.332
549	TP544	654637.771	2980593.489	88° 33' 27.546" E	26° 56' 19.168" N	3.99	63141.85	76°23'35"(R)	682.244
550	TP545	654633.800	2980593.086	88° 33' 27.402" E	26° 56' 19.156" N	4.33	63145.84	66°43'53"(R)	682.398
551	TP546	654632.362	2980597.169	88° 33' 27.351" E	26° 56' 19.290" N	22.26	63150.17	23°24'11"(R)	682.811
552	TP547	654633.915	2980619.372	88° 33' 27.417" E	26° 56' 20.010" N	33.60	63172.43	22°54'56"(L)	683.928
553	TP548	654623.025	2980651.153	88° 33' 27.037" E	26° 56' 21.047" N	34.45	63206.02	8°40'0"(L)	686.052
554	TP549	654607.074	2980681.689	88° 33' 26.472" E	26° 56' 22.046" N	30.12	63240.47	6°13'26"(L)	687.442
555	TP550	654590.314	2980706.720	88° 33' 25.876" E	26° 56' 22.866" N	14.80	63270.60	0°40'15"(L)	688.560
556	TP551	654581.936	2980718.921	88° 33' 25.578" E	26° 56' 23.266" N	26.74	63285.40	25°8'37"(R)	689.549
557	TP552	654577.600	2980745.306	88° 33' 25.432" E	26° 56' 24.125" N	17.27	63312.14	16°24'29"(R)	691.233
558	TP553	654579.727	2980762.442	88° 33' 25.517" E	26° 56' 24.681" N	18.86	63329.40	27°30'43"(L)	692.314
559	TP554	654573.143	2980780.113	88° 33' 25.286" E	26° 56' 25.257" N	20.44	63348.26	61°8'44"(L)	691.651
560	TP555	654552.919	2980783.106	88° 33' 24.554" E	26° 56' 25.363" N	28.41	63368.70	18°4'6"(L)	692.436
561	TP556	654524.910	2980778.343	88° 33' 23.537" E	26° 56' 25.219" N	62.92	63397.12	37°6'43"(L)	693.907
562	TP557	654481.806	2980732.503	88° 33' 21.954" E	26° 56' 23.747" N	44.17	63460.04	27°2'41"(L)	698.453
563	TP558	654469.488	2980690.086	88° 33' 21.488" E	26° 56' 22.374" N	26.74	63504.21	23°7'54"(L)	700.279
564	TP559	654472.718	2980663.543	88° 33' 21.593" E	26° 56' 21.510" N	17.44	63530.95	4°43'15"(L)	701.051
565	TP560	654476.243	2980646.460	88° 33' 21.714" E	26° 56' 20.954" N	30.57	63548.39	5°46'50"(R)	702.250
566	TP561	654479.374	2980616.051	88° 33' 21.814" E	26° 56' 19.964" N	27.50	63578.96	43°14'38"(R)	703.681
567	TP562	654462.684	2980594.194	88° 33' 21.199" E	26° 56' 19.261" N	14.57	63606.46	49°42'28"(R)	705.660
568	TP563	654448.133	2980593.450	88° 33' 20.671" E	26° 56' 19.242" N	30.45	63621.03	43°36'34"(R)	706.812
569	TP564	654425.041	2980613.300	88° 33' 19.843" E	26° 56' 19.897" N	35.69	63651.48	2°30'28"(R)	708.949
570	TP565	654399.019	2980637.728	88° 33' 18.910" E	26° 56' 20.701" N	25.23	63687.17	8°56'2"(L)	710.907
571	TP566	654378.167	2980651.929	88° 33' 18.161" E	26° 56' 21.170" N	32.75	63712.40	30°6'3"(L)	713.395
572	TP567	654345.505	2980654.302	88° 33' 16.978" E	26° 56' 21.261" N	32.86	63745.15	3°30'11"(L)	714.923
573	TP568	654312.652	2980654.676	88° 33' 15.787" E	26° 56' 21.286" N	30.75	63778.00	12°17'5"(L)	717.411
574	TP569	654282.535	2980648.476	88° 33' 14.692" E	26° 56' 21.096" N	23.33	63808.75	15°55'55"(R)	719.534
575	TP570	654259.270	2980650.225	88° 33' 13.850" E	26° 56' 21.163" N	24.46	63832.08	27°1'19"(R)	720.974
576	TP571	654238.375	2980662.940	88° 33' 13.098" E	26° 56' 21.584" N	25.34	63856.54	6°23'26"(R)	722.790
577	TP572	654218.325	2980678.443	88° 33' 12.378" E	26° 56' 22.096" N	28.74	63881.89	34°2'45"(L)	723.936
578	TP573	654189.639	2980680.281	88° 33' 11.339" E	26° 56' 22.167" N	34.20	63910.63	39°16'49"(L)	725.699
579	TP574	654161.838	2980660.367	88° 33' 10.322" E	26° 56' 21.531" N	37.40	63944.83	7°10'33"(R)	728.547
580	TP575	654128.948	2980642.555	88° 33' 9.122" E	26° 56' 20.965" N	34.72	63982.23	0°45'5"(L)	731.527
581	TP576	654098.206	2980626.424	88° 33' 8.000" E	26° 56' 20.454" N	18.56	64016.95	34°59'44"(L)	732.956
582	TP577	654089.689	2980609.935	88° 33' 7.684" E	26° 56' 19.921" N	31.97	64035.51	59°39'15"(L)	734.572
583	TP578	654106.787	2980582.927	88° 33' 8.292" E	26° 56' 19.037" N	33.32	64067.47	13°29'37"(L)	737.039
584	TP579	654130.690	2980559.707	88° 33' 9.148" E	26° 56' 18.273" N	71.18	64100.80	14°29'7"(R)	738.271
585	TP580	654167.716	2980498.918	88° 33' 10.463" E	26° 56' 16.283" N	26.53	64171.98	17°53'37"(L)	742.250
586	TP581	654187.810	2980481.597	88° 33' 11.184" E	26° 56' 15.712" N	51.99	64198.50	12°19'20"(L)	743.223
587	TP582	654233.530	2980456.836	88° 33' 12.830" E	26° 56' 14.889" N	34.07	64250.50	19°42'19"(R)	745.335
588	TP583	654256.265	2980431.458	88° 33' 13.643" E	26° 56' 14.056" N	34.46	64284.57	8°45'43"(R)	747.349
589	TP584	654275.082	2980402.586	88° 33' 14.313" E	26° 56' 13.110" N	51.61	64319.03	1°24'15"(L)	749.492
590	TP585	654304.310	2980360.056	88° 33' 15.353" E	26° 56' 11.717" N	27.79	64370.64	20°18'44"(R)	751.755
591	TP586	654311.120	2980333.115	88° 33' 15.588" E	26° 56' 10.839" N	37.44	64398.43	25°29'57"(R)	753.220
592	TP587	654303.775	2980296.402	88° 33' 15.305" E	26° 56' 9.649" N	10.41	64435.87	82°6'39"(R)	755.340
593	TP588	654293.380	2980297.024	88° 33' 14.929" E	26° 56' 9.673" N	30.48	64446.28	72°32'12"(R)	756.714
594	TP589	654285.987	2980326.590	88° 33' 14.674" E	26° 56' 10.637" N	17.52	64476.76	73°47'9"(L)	760.331

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
595	TP590	654268.479	2980327.255	88° 33' 14.040" E	26° 56' 10.665" N	38.32	64494.28	74°12'14"(R)	759.773
596	TP591	654259.455	2980364.496	88° 33' 13.729" E	26° 56' 11.879" N	64.09	64532.60	33°59'40"(L)	761.953
597	TP592	654212.115	2980407.700	88° 33' 12.032" E	26° 56' 13.301" N	21.16	64596.69	2°51'1"(L)	765.653
598	TP593	654195.797	2980421.168	88° 33' 11.447" E	26° 56' 13.746" N	26.81	64617.85	4°49'0"(L)	766.934
599	TP594	654173.756	2980436.440	88° 33' 10.654" E	26° 56' 14.251" N	28.76	64644.66	7°3'59"(L)	768.192
600	TP595	654148.285	2980449.785	88° 33' 9.737" E	26° 56' 14.694" N	109.43	64673.42	10°48'39"(R)	770.177
601	TP596	654062.602	2980517.848	88° 33' 6.661" E	26° 56' 16.940" N	29.61	64782.84	6°21'28"(L)	776.819
602	TP597	654037.524	2980533.582	88° 33' 5.759" E	26° 56' 17.461" N	34.55	64812.45	0°13'27"(R)	778.877
603	TP598	654008.333	2980552.056	88° 33' 4.709" E	26° 56' 18.073" N	60.64	64846.99	7°52'47"(R)	781.527
604	TP599	653962.021	2980591.204	88° 33' 3.048" E	26° 56' 19.363" N	31.35	64907.64	7°44'54"(R)	783.943
605	TP600	653941.023	2980614.489	88° 33' 2.297" E	26° 56' 20.128" N	19.26	64938.99	0°23'30"(R)	784.696
606	TP601	653928.221	2980628.882	88° 33' 1.839" E	26° 56' 20.601" N	19.20	64958.25	39°26'51"(R)	785.694
607	TP602	653927.482	2980648.073	88° 33' 1.821" E	26° 56' 21.225" N	22.19	64977.46	49°29'23"(R)	786.978
608	TP603	653943.784	2980663.123	88° 33' 2.418" E	26° 56' 21.707" N	29.54	64999.64	11°1'17"(R)	787.930
609	TP604	653968.923	2980678.645	88° 33' 3.337" E	26° 56' 22.202" N	30.35	65029.19	1°26'20"(R)	789.508
610	TP605	653995.142	2980693.938	88° 33' 4.294" E	26° 56' 22.688" N	19.74	65059.54	3°44'16"(L)	791.654
611	TP606	654011.507	2980704.973	88° 33' 4.892" E	26° 56' 23.040" N	36.56	65079.28	13°6'35"(L)	793.000
612	TP607	654036.391	2980731.753	88° 33' 5.806" E	26° 56' 23.900" N	27.83	65115.84	10°3'19"(R)	795.381
613	TP608	654058.604	2980748.520	88° 33' 6.619" E	26° 56' 24.436" N	21.60	65143.67	24°52'36"(R)	796.947
614	TP609	654079.716	2980753.073	88° 33' 7.386" E	26° 56' 24.576" N	4.00	65165.26	22°5'59"(L)	798.818
615	TP610	654083.024	2980755.327	88° 33' 7.507" E	26° 56' 24.648" N	19.58	65169.27	136°48'33"(L)	799.502
616	TP611	654063.677	2980758.364	88° 33' 6.807" E	26° 56' 24.754" N	26.14	65188.85	24°14'52"(L)	802.241
617	TP612	654038.468	2980751.455	88° 33' 5.890" E	26° 56' 24.540" N	35.24	65214.99	23°54'12"(L)	803.620
618	TP613	654011.167	2980729.165	88° 33' 4.891" E	26° 56' 23.826" N	11.92	65250.23	6°1'7"(R)	806.959
619	TP614	654001.194	2980722.636	88° 33' 4.526" E	26° 56' 23.618" N	6.55	65262.16	87°11'59"(R)	808.546
620	TP614A	653997.343	2980727.934	88° 33' 4.389" E	26° 56' 23.792" N	6.21	65268.70	34°46'23"(R)	808.546
621	TP615	653997.209	2980734.138	88° 33' 4.387" E	26° 56' 23.994" N	38.09	65274.91	54°39'27"(R)	808.964
622	TP616	654019.357	2980765.133	88° 33' 5.203" E	26° 56' 24.992" N	27.96	65313.01	11°31'0"(R)	812.248
623	TP617	654039.829	2980784.180	88° 33' 5.954" E	26° 56' 25.603" N	36.45	65340.97	31°54'43"(R)	814.074
624	TP618	654075.610	2980791.150	88° 33' 7.254" E	26° 56' 25.815" N	36.69	65377.42	2°30'4"(L)	816.462
625	TP619	654111.278	2980799.729	88° 33' 8.551" E	26° 56' 26.079" N	25.38	65414.11	13°36'30"(L)	819.421
626	TP620	654133.866	2980811.304	88° 33' 9.375" E	26° 56' 26.446" N	28.99	65439.49	11°26'27"(L)	820.927
627	TP621	654156.531	2980829.380	88° 33' 10.205" E	26° 56' 27.025" N	22.46	65468.48	17°27'27"(R)	823.132
628	TP622	654177.482	2980837.471	88° 33' 10.968" E	26° 56' 27.279" N	33.51	65490.94	23°5'40"(R)	824.652
629	TP623	654210.972	2980836.314	88° 33' 12.182" E	26° 56' 27.228" N	23.12	65524.45	4°41'54"(L)	826.728
630	TP624	654234.065	2980837.411	88° 33' 13.019" E	26° 56' 27.255" N	23.59	65547.57	39°50'25"(R)	828.625
631	TP625	654252.877	2980823.173	88° 33' 13.695" E	26° 56' 26.784" N	21.49	65571.16	17°3'44"(L)	829.747
632	TP626	654273.062	2980815.803	88° 33' 14.423" E	26° 56' 26.537" N	16.79	65592.65	6°12'40"(L)	831.036
633	TP627	654289.362	2980811.785	88° 33' 15.013" E	26° 56' 26.400" N	9.21	65609.43	41°13'34"(L)	832.254
634	TP628	654297.543	2980816.022	88° 33' 15.311" E	26° 56' 26.534" N	11.80	65618.65	40°6'20"(L)	833.466
635	TP629	654302.061	2980826.921	88° 33' 15.480" E	26° 56' 26.887" N	31.17	65630.45	23°50'15"(L)	834.076
636	TP630	654301.342	2980858.083	88° 33' 15.467" E	26° 56' 27.899" N	38.80	65661.62	19°9'47"(R)	836.893
637	TP631	654313.229	2980895.015	88° 33' 15.915" E	26° 56' 29.095" N	36.79	65700.41	2°55'31"(L)	839.799
638	TP632	654322.699	2980930.566	88° 33' 16.274" E	26° 56' 30.246" N	23.89	65737.20	29°8'26"(L)	842.741
639	TP633	654316.829	2980953.722	88° 33' 16.072" E	26° 56' 31.001" N	15.79	65761.09	38°33'26"(L)	844.638
640	TP634	654304.253	2980963.274	88° 33' 15.620" E	26° 56' 31.316" N	30.50	65776.89	14°18'2"(L)	845.584
641	TP635	654276.165	2980975.149	88° 33' 14.607" E	26° 56' 31.713" N	30.50	65807.38	11°19'41"(R)	846.577
642	TP636	654250.955	2980992.311	88° 33' 13.701" E	26° 56' 32.281" N	15.70	65837.88	85°44'15"(R)	848.211
643	TP636A	654258.800	2981005.908	88° 33' 13.991" E	26° 56' 32.719" N	16.65	65853.58	21°14'2"(R)	848.211
644	TP637	654271.780	2981016.338	88° 33' 14.466" E	26° 56' 33.053" N	10.79	65870.23	6°30'17"(L)	849.550
645	TP638	654277.876	2981025.237	88° 33' 14.691" E	26° 56' 33.340" N	23.61	65881.01	52°5'42"(L)	850.569
646	TP639	654270.704	2981047.733	88° 33' 14.441" E	26° 56' 34.074" N	20.35	65904.63	19°19'30"(R)	852.863
647	TP640	654271.287	2981068.071	88° 33' 14.471" E	26° 56' 34.734" N	15.41	65924.97	2°39'37"(R)	854.653
648	TP641	654272.443	2981083.437	88° 33' 14.520" E	26° 56' 35.233" N	19.43	65940.38	48°30'42"(R)	855.892
649	TP642	654287.923	2981095.181	88° 33' 15.087" E	26° 56' 35.608" N	8.75	65959.81	68°12'41"(R)	857.341
650	TP643	654295.423	2981090.670	88° 33' 15.357" E	26° 56' 35.459" N	20.33	65968.56	22°9'9"(R)	857.383
651	TP644	654307.608	2981074.395	88° 33' 15.791" E	26° 56' 34.925" N	19.37	65988.89	15°51'14"(L)	858.393
652	TP645	654323.012	2981062.650	88° 33' 16.344" E	26° 56' 34.537" N	19.61	66008.27	9°16'43"(L)	859.398
653	TP646	654340.321	2981053.429	88° 33' 16.968" E	26° 56' 34.231" N	10.80	66027.88	58°58'42"(L)	860.309
654	TP647	654349.589	2981058.983	88° 33' 17.306" E	26° 56' 34.408" N	23.55	66038.68	63°44'57"(L)	861.320
655	TP648	654347.667	2981082.451	88° 33' 17.247" E	26° 56' 35.171" N	26.07	66062.23	30°36'26"(R)	863.037
656	TP649	654359.066	2981105.900	88° 33' 17.671" E	26° 56' 35.928" N	21.87	66088.30	0°36'25"(R)	866.173
657	TP650	654368.834	2981125.464	88° 33' 18.033" E	26° 56' 36.560" N	16.93	66110.17	42°8'11"(L)	868.503
658	TP651	654364.280	2981141.770	88° 33' 17.876" E	26° 56' 37.092" N	23.43	66127.10	18°36'56"(R)	869.999
659	TP652	654365.511	2981165.170	88° 33' 17.931" E	26° 56' 37.851" N	29.86	66150.53	28°7'23"(R)	872.699
660	TP653	654380.952	2981190.732	88° 33' 18.502" E	26° 56' 38.676" N	13.76	66180.39	18°7'56"9(L)	874.711

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
661	TP654	654384.049	2981204.144	88° 33' 18.620" E	26° 56' 39.110" N	17.60	66194.16	29°36'24"(L)	875.910
662	TP655	654379.020	2981221.009	88° 33' 18.445" E	26° 56' 39.660" N	43.59	66211.76	32°3'5"(R)	877.131
663	TP656	654390.630	2981263.022	88° 33' 18.885" E	26° 56' 41.021" N	7.80	66255.35	18°14'49"(R)	879.888
664	TP657	654394.958	2981269.513	88° 33' 19.045" E	26° 56' 41.230" N	8.67	66263.15	86°5'2"(L)	881.813
665	TP658	654388.089	2981274.805	88° 33' 18.798" E	26° 56' 41.404" N	10.58	66271.82	78°19'24"(L)	883.075
666	TP659	654380.066	2981267.901	88° 33' 18.504" E	26° 56' 41.183" N	26.50	66282.40	28°33'13"(L)	883.608
667	TP660	654370.684	2981243.116	88° 33' 18.153" E	26° 56' 40.382" N	27.36	66308.90	6°28'57"(R)	886.351
668	TP661	654358.173	2981218.789	88° 33' 17.689" E	26° 56' 39.596" N	24.31	66336.26	33°32'14"(L)	889.282
669	TP662	654360.850	2981194.623	88° 33' 17.775" E	26° 56' 38.810" N	34.70	66360.57	43°42'41"(R)	890.779
670	TP663	654339.781	2981167.056	88° 33' 16.999" E	26° 56' 37.923" N	19.48	66395.27	28°38'44"(L)	892.895
671	TP664	654336.819	2981147.801	88° 33' 16.883" E	26° 56' 37.298" N	26.91	66414.75	86°19'35"(R)	895.267
672	TP665	654310.015	2981150.179	88° 33' 15.912" E	26° 56' 37.386" N	35.91	66441.66	17°16'27"(R)	898.914
673	TP666	654285.970	2981176.852	88° 33' 15.052" E	26° 56' 38.263" N	30.12	66477.57	28°16'18"(L)	900.971
674	TP667	654257.608	2981187.004	88° 33' 14.029" E	26° 56' 38.604" N	27.41	66507.70	5°55'37"(L)	902.364
675	TP668	654230.990	2981193.526	88° 33' 13.066" E	26° 56' 38.826" N	19.19	66535.10	30°31'32"(L)	903.699
676	TP669	654212.612	2981187.992	88° 33' 12.398" E	26° 56' 38.654" N	29.28	66554.30	50°11'58"(L)	904.897
677	TP670	654201.151	2981161.047	88° 33' 11.970" E	26° 56' 37.783" N	56.46	66583.58	8°59'31"(L)	907.049
678	TP671	654187.444	2981106.277	88° 33' 11.449" E	26° 56' 36.009" N	2.33	66640.04	55°58'29"(R)	909.056
679	TP672	654185.254	2981105.481	88° 33' 11.369" E	26° 56' 35.984" N	12.61	66642.37	124°28'29"(R)	909.314
680	TP673	654188.412	2981117.692	88° 33' 11.489" E	26° 56' 36.379" N	28.64	66654.98	11°4'24"(L)	912.041
681	TP674	654190.124	2981146.283	88° 33' 11.564" E	26° 56' 37.308" N	43.26	66683.62	3°13'36"(L)	916.031
682	TP675	654190.275	2981189.538	88° 33' 11.589" E	26° 56' 38.713" N	24.57	66726.88	16°56'8"(L)	920.148
683	TP676	654183.201	2981213.064	88° 33' 11.343" E	26° 56' 39.480" N	46.46	66751.44	9°34'58"(R)	920.921
684	TP677	654177.416	2981259.163	88° 33' 11.153" E	26° 56' 40.980" N	39.10	66797.90	35°57'13"(R)	921.230
685	TP678	654196.254	2981293.428	88° 33' 11.852" E	26° 56' 42.086" N	31.67	66837.01	27°38'25"(L)	923.539
686	TP679	654196.895	2981325.096	88° 33' 11.889" E	26° 56' 43.115" N	25.50	66868.68	18°49'8"(L)	923.457
687	TP680	654189.161	2981349.392	88° 33' 11.619" E	26° 56' 43.907" N	18.42	66894.18	7°5'14"(L)	924.879
688	TP681	654181.449	2981366.124	88° 33' 11.347" E	26° 56' 44.454" N	26.73	66912.60	4°36'3"(L)	927.168
689	TP682	654168.350	2981389.422	88° 33' 10.883" E	26° 56' 45.216" N	27.37	66939.33	7°27'34"(L)	930.519
690	TP683	654151.955	2981411.333	88° 33' 10.298" E	26° 56' 45.935" N	32.35	66966.69	7°40'51"(L)	933.053
691	TP684	654129.285	2981434.413	88° 33' 9.487" E	26° 56' 46.694" N	36.53	66999.05	6°42'21"(L)	935.806
692	TP685	654100.822	2981457.304	88° 33' 8.465" E	26° 56' 47.449" N	29.78	67035.57	23°7'9"(L)	937.253
693	TP686	654072.154	2981465.356	88° 33' 7.429" E	26° 56' 47.722" N	34.50	67065.35	9°38'4"(L)	937.738
694	TP687	654037.842	2981468.995	88° 33' 6.187" E	26° 56' 47.854" N	28.14	67099.85	7°33'1"(R)	938.675
695	TP688	654010.487	2981475.615	88° 33' 5.198" E	26° 56' 48.080" N	30.92	67128.00	10°28'8"(L)	939.713
696	TP689	653979.615	2981477.306	88° 33' 4.079" E	26° 56' 48.147" N	17.92	67158.92	53°6'58"(R)	939.386
697	TP690	653969.659	2981492.207	88° 33' 3.725" E	26° 56' 48.635" N	41.09	67176.84	30°52'49"(R)	939.551
698	TP691	653967.603	2981533.241	88° 33' 3.669" E	26° 56' 49.969" N	28.98	67217.92	58°1'12"(L)	940.817
699	TP692	653942.286	2981547.339	88° 33' 2.757" E	26° 56' 50.437" N	43.94	67246.90	30°30'58"(L)	942.863
700	TP693	653898.361	2981546.262	88° 33' 1.164" E	26° 56' 50.420" N	34.77	67290.84	12°32'45"(R)	944.191
701	TP694	653864.249	2981552.980	88° 32' 59.931" E	26° 56' 50.652" N	64.97	67325.61	37°16'51"(L)	946.889
702	TP695	653805.928	2981524.359	88° 32' 57.803" E	26° 56' 49.745" N	28.60	67390.57	87°38'8"(R)	947.901
703	TP696	653792.281	2981549.488	88° 32' 57.320" E	26° 56' 50.567" N	32.13	67419.17	4°47'49"(L)	950.434
704	TP697	653777.162	2981577.842	88° 32' 56.784" E	26° 56' 51.494" N	27.45	67451.30	64°52'8"(L)	951.399
705	TP698	653749.750	2981576.436	88° 32' 55.790" E	26° 56' 51.459" N	36.66	67478.75	4°53'36"(L)	952.890
706	TP699	653713.428	2981571.441	88° 32' 54.471" E	26° 56' 51.312" N	24.48	67515.41	20°11'13"(L)	956.757
707	TP700	653691.815	2981559.941	88° 32' 53.682" E	26° 56' 50.947" N	23.90	67539.89	34°27'19"(R)	958.350
708	TP701	653668.069	2981562.621	88° 32' 52.822" E	26° 56' 51.043" N	40.71	67563.79	24°1'27"(L)	961.878
709	TP702	653629.260	2981550.321	88° 32' 51.410" E	26° 56' 50.659" N	14.68	67604.50	43°43'45"(R)	963.732
710	TP703	653616.081	2981556.790	88° 32' 50.935" E	26° 56' 50.874" N	27.52	67619.18	48°23'13"(R)	967.245
711	TP704	653608.740	2981583.316	88° 32' 50.681" E	26° 56' 51.739" N	23.54	67646.71	7°18'39"(R)	969.744
712	TP705	653605.399	2981606.621	88° 32' 50.570" E	26° 56' 52.498" N	41.37	67670.25	24°27'28"(R)	970.406
713	TP706	653617.009	2981646.328	88° 32' 51.008" E	26° 56' 53.783" N	34.52	67711.62	24°52'1"(R)	973.030
714	TP707	653639.734	2981672.317	88° 32' 51.844" E	26° 56' 54.619" N	23.31	67746.14	16°25'8"(L)	976.316
715	TP708	653649.492	2981693.488	88° 32' 52.207" E	26° 56' 55.303" N	9.22	67769.45	10°53'13"(L)	923.539
716	TP709	653651.701	2981702.442	88° 32' 52.291" E	26° 56' 55.593" N	11.74	67778.68	19°6'56"(L)	978.458
717	TP710	653650.626	2981714.131	88° 32' 52.257" E	26° 56' 55.973" N	24.79	67790.42	3°43'53"(L)	980.114
718	TP711	653646.754	2981738.618	88° 32' 52.128" E	26° 56' 56.770" N	24.12	67815.21	22°18'9"(R)	979.977
719	TP712	653652.309	2981762.092	88° 32' 52.340" E	26° 56' 57.530" N	7.83	67839.33	89°7'51"(R)	984.874
720	TP713	653659.956	2981760.404	88° 32' 52.616" E	26° 56' 57.473" N	20.44	67847.16	69°36'27"(R)	985.457
721	TP714	653659.885	2981739.967	88° 32' 52.604" E	26° 56' 56.809" N	10.37	67867.60	6°33'55"(R)	985.891
722	TP715	653658.663	2981729.666	88° 32' 52.556" E	26° 56' 56.474" N	34.49	67877.97	13°6'32"(L)	985.997
723	TP716	653662.474	2981695.384	88° 32' 52.679" E	26° 56' 55.359" N	35.03	67912.46	12°32'23"(R)	988.194
724	TP717	653658.694	2981660.562	88° 32' 52.526" E	26° 56' 54.229" N	43.40	67947.49	22°19'6"(R)	989.807
725	TP718	653637.977	2981622.429	88° 32' 51.758" E	26° 56' 52.998" N	10.77	67990.89	81°45'54"(L)	992.027
726	TP719	653646.610	2981615.982	88° 32' 52.068" E	26° 56' 52.785" N	9.68	68001.66	5°10'10"(L)	995.547

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
727	TP720	653656.195	2981614.654	88° 32' 52.415" E	26° 56' 52.738" N	35.85	68011.34	76°26'11"(L)	995.793
728	TP721	653669.308	2981648.022	88° 32' 52.905" E	26° 56' 53.817" N	31.09	68047.19	6°43'19"(L)	997.649
729	TP722	653677.216	2981678.094	88° 32' 53.205" E	26° 56' 54.791" N	37.71	68078.28	9°37'47"(L)	999.579
730	TP723	653680.570	2981715.659	88° 32' 53.344" E	26° 56' 56.011" N	35.48	68116.00	25°0'34"(R)	1001.651
731	TP724	653698.372	2981746.354	88° 32' 54.003" E	26° 56' 57.001" N	31.50	68151.48	43°16'44"(R)	1004.219
732	TP725	653728.555	2981755.357	88° 32' 55.101" E	26° 56' 57.281" N	34.17	68182.98	32°23'49"(L)	1006.568
733	TP726	653750.967	2981781.144	88° 32' 55.925" E	26° 56' 58.110" N	55.15	68217.15	17°10'0"(R)	1008.429
734	TP727	653797.822	2981810.240	88° 32' 57.637" E	26° 56' 59.037" N	50.58	68272.30	1°29'4"(R)	1012.375
735	TP728	653841.469	2981835.801	88° 32' 59.230" E	26° 56' 59.850" N	30.69	68322.88	4°20'44"(L)	1016.029
736	TP729	653866.698	2981853.270	88° 33' 0.153" E	26° 57' 0.408" N	60.54	68353.57	16°3'37"(L)	1018.284
737	TP730	653904.991	2981900.156	88° 33' 1.562" E	26° 57' 1.916" N	34.97	68414.10	34°20'17"(R)	1022.077
738	TP731	653938.533	2981910.043	88° 33' 2.783" E	26° 57' 2.224" N	35.79	68449.07	24°22'40"(R)	1024.643
739	TP732	653973.981	2981905.089	88° 33' 4.066" E	26° 57' 2.048" N	18.21	68484.86	3°56'14"(R)	1027.681
740	TP733	653991.799	2981901.337	88° 33' 4.710" E	26° 57' 1.919" N	28.03	68503.07	3°1'27"(R)	1030.244
741	TP734	654018.885	2981894.121	88° 33' 5.689" E	26° 57' 1.674" N	24.04	68531.10	14°25'38"(R)	1032.724
742	TP735	654039.842	2981882.340	88° 33' 6.443" E	26° 57' 1.283" N	8.11	68555.15	5°40'46"(R)	1034.809
743	TP736	654044.428	2981875.655	88° 33' 6.607" E	26° 57' 1.064" N	14.42	68563.25	86°53'44"(R)	1036.682
744	TP737	654033.000	2981866.868	88° 33' 6.188" E	26° 57' 0.783" N	35.58	68577.67	59°43'17"(R)	1038.612
745	TP738	654000.052	2981880.291	88° 33' 5.000" E	26° 57' 1.232" N	23.34	68613.24	21°13'48"(L)	1038.745
746	TP739	653976.717	2981880.672	88° 33' 4.154" E	26° 57' 1.254" N	19.50	68636.58	37°28'46"(L)	1038.688
747	TP740	653961.047	2981869.058	88° 33' 3.581" E	26° 57' 0.883" N	19.77	68656.09	34°56'17"(L)	1038.894
748	TP741	653954.768	2981850.311	88° 33' 3.345" E	26° 57' 0.276" N	30.00	68675.86	29°36'3"(L)	1038.995
749	TP742	653960.536	2981820.865	88° 33' 3.541" E	26° 56' 59.317" N	16.87	68705.86	39°51'18"(R)	1039.794
750	TP743	653952.414	2981806.075	88° 33' 3.240" E	26° 56' 58.840" N	22.85	68722.74	22°23'24"(R)	1039.853
751	TP744	653934.612	2981791.742	88° 33' 2.588" E	26° 56' 58.381" N	23.79	68745.59	10°4'52"(L)	1041.256
752	TP745	653918.982	2981773.813	88° 33' 2.013" E	26° 56' 57.805" N	29.35	68769.38	44°13'0"(L)	1042.653
753	TP746	653920.587	2981744.511	88° 33' 2.058" E	26° 56' 56.852" N	18.30	68798.72	36°28'52"(L)	1043.088
754	TP747	653932.256	2981730.414	88° 33' 2.475" E	26° 56' 56.390" N	43.83	68817.02	25°43'7"(R)	1044.448
755	TP748	653942.783	2981687.870	88° 33' 2.838" E	26° 56' 55.003" N	31.27	68860.85	12°20'3"(L)	1047.168
756	TP749	653956.605	2981659.820	88° 33' 3.326" E	26° 56' 54.086" N	10.88	68892.12	0°6'55"(L)	1046.749
757	TP750	653961.397	2981650.046	88° 33' 3.496" E	26° 56' 53.767" N	26.48	68903.01	62°51'10"(L)	1046.967
758	TP751	653987.877	2981649.570	88° 33' 4.456" E	26° 56' 53.741" N	33.09	68929.49	16°14'57"(R)	1048.434
759	TP752	654019.478	2981639.741	88° 33' 5.597" E	26° 56' 53.409" N	39.25	68962.58	10°53'32"(R)	1050.404
760	TP753	654054.076	2981621.212	88° 33' 6.843" E	26° 56' 52.793" N	29.29	69001.83	12°3'24"(L)	1053.618
761	TP754	654082.212	2981613.083	88° 33' 7.860" E	26° 56' 52.518" N	11.30	69031.12	22°21'13"(R)	1056.164
762	TP755	654091.061	2981606.052	88° 33' 8.177" E	26° 56' 52.286" N	24.61	69042.42	30°8'37"(R)	1056.684
763	TP756	654100.036	2981583.137	88° 33' 8.492" E	26° 56' 51.538" N	29.67	69067.03	17°40'52"(R)	1058.463
764	TP757	654101.954	2981553.526	88° 33' 8.549" E	26° 56' 50.575" N	19.83	69096.70	37°11'50"(L)	1060.505
765	TP758	654114.936	2981538.541	88° 33' 9.013" E	26° 56' 50.083" N	54.95	69116.53	30°36'18"(L)	1061.943
766	TP759	654167.048	2981521.114	88° 33' 10.894" E	26° 56' 49.496" N	18.82	69171.48	6°16'28"(R)	1067.326
767	TP760	654184.133	2981513.232	88° 33' 11.510" E	26° 56' 49.233" N	17.91	69190.29	34°27'38"(L)	1067.955
768	TP761	654201.790	2981516.248	88° 33' 12.152" E	26° 56' 49.324" N	34.72	69208.21	26°2'1"(L)	1068.688
769	TP762	654229.974	2981536.522	88° 33' 13.182" E	26° 56' 49.971" N	14.96	69242.93	42°53'47"(L)	1070.341
770	TP763	654232.924	2981551.186	88° 33' 13.296" E	26° 56' 50.446" N	30.44	69257.88	39°14'56"(L)	1071.585
771	TP764	654218.694	2981578.091	88° 33' 12.792" E	26° 56' 51.326" N	30.20	69288.32	6°1'58"(R)	1072.855
772	TP765	654207.460	2981606.121	88° 33' 12.397" E	26° 56' 52.241" N	27.89	69318.52	44°18'46"(R)	1073.997
773	TP766	654218.121	2981631.895	88° 33' 12.795" E	26° 56' 53.075" N	62.66	69346.41	23°14'57"(R)	1075.464
774	TP767	654262.983	2981675.642	88° 33' 14.441" E	26° 56' 54.478" N	33.43	69409.07	15°53'17"(L)	1080.636
775	TP768	654279.615	2981704.645	88° 33' 15.057" E	26° 56' 55.414" N	72.38	69442.50	2°50'31"(R)	1083.265
776	TP769	654318.693	2981765.573	88° 33' 16.501" E	26° 56' 57.378" N	28.89	69514.89	35°15'0"(R)	1088.758
777	TP770	654345.466	2981776.431	88° 33' 17.477" E	26° 56' 57.720" N	26.02	69543.78	15°48'5"(R)	1091.667
778	TP771	654371.334	2981779.275	88° 33' 18.416" E	26° 56' 57.802" N	25.75	69569.80	23°40'31"(L)	1093.829
779	TP772	654393.643	2981792.128	88° 33' 19.230" E	26° 56' 58.211" N	18.60	69595.55	5°18'27"(L)	1096.714
780	TP773	654408.830	2981802.864	88° 33' 19.786" E	26° 56' 58.553" N	27.50	69614.15	7°51'40"(R)	1098.552
781	TP774	654433.243	2981815.516	88° 33' 20.676" E	26° 56' 58.955" N	26.53	69641.64	59°48'9"(L)	1100.689
782	TP775	654434.540	2981842.018	88° 33' 20.735" E	26° 56' 59.815" N	52.34	69668.18	37°43'34"(R)	1103.865
783	TP776	654468.552	2981881.802	88° 33' 21.986" E	26° 57' 1.094" N	38.05	69720.52	27°32'49"(R)	1108.745
784	TP777	654503.851	2981896.010	88° 33' 23.272" E	26° 57' 1.542" N	28.62	69758.57	17°42'49"(L)	1110.990
785	TP778	654525.894	2981914.271	88° 33' 24.080" E	26° 57' 2.126" N	20.90	69787.19	31°40'14"(L)	1111.372
786	TP779	654532.593	2981934.072	88° 33' 24.331" E	26° 57' 2.767" N	8.93	69808.10	26°31'20"(L)	1111.103
787	TP780	654531.376	2981942.918	88° 33' 24.291" E	26° 57' 3.055" N	30.83	69817.03	13°39'11"(L)	1111.378
788	TP781	654520.086	2981971.602	88° 33' 23.895" E	26° 57' 3.991" N	41.55	69847.85	34°31'15"(L)	1112.264
789	TP782	654529.458	2982012.079	88° 33' 24.252" E	26° 57' 5.303" N	34.36	69889.40	22°24'37"(R)	1113.515
790	TP783	654549.383	2982040.069	88° 33' 24.987" E	26° 57' 6.204" N	49.32	69923.76	4°56'14"(L)	1114.303
791	TP784	654574.423	2982082.562	88° 33' 25.914" E	26° 57' 7.575" N	29.60	69973.08	10°47'59"(L)	1112.136
792	TP785	654584.406	2982110.427	88° 33' 26.289" E	26° 57' 8.476" N	47.57	70002.68	22°16'58"(R)	1110.789

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
793	TP786	654616.233	2982145.785	88° 33' 27.458" E	26° 57' 9.612" N	10.22	70050.25	16°39'12"(L)	1106.922
794	TP787	654620.607	2982155.021	88° 33' 27.621" E	26° 57' 9.911" N	26.45	70060.47	26°36'11"(L)	1106.232
795	TP788	654620.023	2982181.464	88° 33' 27.612" E	26° 57' 10.770" N	34.01	70086.92	24°4'28"(L)	1104.185
796	TP789	654605.468	2982212.203	88° 33' 27.098" E	26° 57' 11.775" N	19.32	70120.93	54°48'28"(R)	1102.070
797	TP790	654614.974	2982229.026	88° 33' 27.450" E	26° 57' 12.317" N	68.29	70140.25	63°25'54"(R)	1100.616
798	TP791	654683.176	2982225.570	88° 33' 29.921" E	26° 57' 12.178" N	14.74	70208.54	45°52'48"(L)	1096.711
799	TP792	654693.959	2982235.619	88° 33' 30.316" E	26° 57' 12.500" N	37.16	70223.28	25°57'23"(L)	1095.942
800	TP793	654707.315	2982270.294	88° 33' 30.816" E	26° 57' 13.621" N	26.85	70260.44	9°47'10"(L)	1093.964
801	TP794	654712.566	2982296.626	88° 33' 31.018" E	26° 57' 14.475" N	28.64	70287.29	0°4'43"(R)	1092.271
802	TP795	654718.205	2982324.701	88° 33' 31.235" E	26° 57' 15.385" N	30.33	70315.93	56°3'43"(R)	1090.890
803	TP796	654746.212	2982336.349	88° 33' 32.256" E	26° 57' 15.752" N	26.02	70346.26	17°1'57"(R)	1088.002
804	TP797	654772.107	2982338.864	88° 33' 33.196" E	26° 57' 15.823" N	27.24	70372.28	32°33'2"(L)	1084.661
805	TP798	654793.542	2982355.672	88° 33' 33.981" E	26° 57' 16.361" N	28.23	70399.52	38°54'15"(L)	1082.674
806	TP799	654799.892	2982383.183	88° 33' 34.223" E	26° 57' 17.252" N	21.87	70427.75	23°18'8"(R)	1081.114
807	TP800	654812.837	2982400.807	88° 33' 34.700" E	26° 57' 17.819" N	34.05	70449.62	12°18'58"(R)	1079.921
808	TP801	654838.388	2982423.321	88° 33' 35.637" E	26° 57' 18.541" N	14.41	70483.67	24°4'37"(L)	1079.860
809	TP802	654844.372	2982436.430	88° 33' 35.860" E	26° 57' 18.964" N	20.91	70498.08	29°36'6"(L)	1080.736
810	TP803	654842.526	2982457.261	88° 33' 35.802" E	26° 57' 19.642" N	37.21	70519.00	22°29'8"(L)	1079.781
811	TP804	654825.314	2982490.256	88° 33' 35.193" E	26° 57' 20.721" N	36.83	70556.21	9°57'17"(R)	1077.058
812	TP805	654814.183	2982525.359	88° 33' 34.805" E	26° 57' 21.866" N	29.91	70593.04	1°48'25"(R)	1074.328
813	TP806	654806.045	2982554.141	88° 33' 34.523" E	26° 57' 22.804" N	30.19	70622.95	33°25'36"(R)	1072.014
814	TP807	654815.191	2982582.907	88° 33' 34.867" E	26° 57' 23.735" N	40.90	70653.13	4°42'1"(L)	1069.474
815	TP808	654824.350	2982622.771	88° 33' 35.217" E	26° 57' 25.027" N	24.15	70694.04	2°16'34"(L)	1065.689
816	TP809	654828.818	2982646.506	88° 33' 35.390" E	26° 57' 25.796" N	30.05	70718.19	2°12'39"(R)	1063.679
817	TP810	654835.513	2982675.800	88° 33' 35.646" E	26° 57' 26.745" N	31.26	70748.24	0°33'14"(R)	1061.622
818	TP811	654842.771	2982706.202	88° 33' 35.922" E	26° 57' 27.730" N	23.41	70779.49	1°16'8"(R)	1058.859
819	TP812	654848.711	2982728.848	88° 33' 36.148" E	26° 57' 28.463" N	31.98	70802.90	7°31'59"(R)	1056.937
820	TP813	654860.810	2982758.455	88° 33' 36.600" E	26° 57' 29.421" N	46.30	70834.89	13°27'28"(R)	1055.540
821	TP814	654887.821	2982796.063	88° 33' 37.596" E	26° 57' 30.632" N	24.89	70881.19	8°29'57"(R)	1056.823
822	TP815	654905.167	2982813.908	88° 33' 38.233" E	26° 57' 31.205" N	26.97	70906.08	42°18'31"(L)	1058.419
823	TP816	654906.051	2982840.867	88° 33' 38.277" E	26° 57' 32.080" N	68.82	70933.05	17°43'5"(L)	1061.875
824	TP817	654887.267	2982907.070	88° 33' 37.626" E	26° 57' 34.239" N	47.95	71001.87	28°22'29"(R)	1068.114
825	TP818	654897.673	2982953.876	88° 33' 38.024" E	26° 57' 35.755" N	30.89	71049.82	5°58'3"(L)	1071.974
826	TP819	654901.205	2982984.563	88° 33' 38.166" E	26° 57' 36.751" N	31.04	71080.71	24°51'32"(R)	1074.613
827	TP820	654917.390	2983011.051	88° 33' 38.765" E	26° 57' 37.605" N	28.47	71111.75	16°2'4"(R)	1076.546
828	TP821	654938.369	2983030.302	88° 33' 39.534" E	26° 57' 38.222" N	9.57	71140.22	19°58'17"(R)	1079.325
829	TP822	654947.209	2983033.976	88° 33' 39.856" E	26° 57' 38.338" N	26.47	71149.79	17°47'28"(R)	1079.991
830	TP823	654973.587	2983036.181	88° 33' 40.813" E	26° 57' 38.399" N	14.73	71176.26	19°27'10"(R)	1082.547
831	TP823A	654987.211	2983030.591	88° 33' 41.305" E	26° 57' 38.212" N	7.49	71190.99	41°4'15"(L)	1082.547
832	TP824	654994.313	2983032.983	88° 33' 41.563" E	26° 57' 38.287" N	145.75	71198.48	81°47'36"(L)	1084.874
833	TP825	654967.609	2983176.266	88° 33' 40.659" E	26° 57' 42.953" N	55.73	71344.23	53°20'12"(R)	1097.875
834	TP826	655005.462	2983217.172	88° 33' 42.050" E	26° 57' 44.267" N	63.09	71399.97	17°52'20"(L)	1098.645
835	TP827	655032.033	2983274.395	88° 33' 43.039" E	26° 57' 46.115" N	32.15	71463.06	31°56'21"(L)	1101.654
836	TP828	655028.097	2983306.302	88° 33' 42.911" E	26° 57' 47.154" N	22.13	71495.21	39°45'58"(R)	1103.789
837	TP829	655040.064	2983324.918	88° 33' 43.353" E	26° 57' 47.754" N	31.01	71517.34	40°9'59"(R)	1104.877
838	TP830	655069.704	2983334.036	88° 33' 44.432" E	26° 57' 48.038" N	51.32	71548.35	12°57'26"(L)	1105.745
839	TP831	655114.123	2983359.739	88° 33' 46.054" E	26° 57' 48.855" N	23.83	71599.67	19°9'51"(L)	1108.564
840	TP832	655129.690	2983377.787	88° 33' 46.627" E	26° 57' 49.435" N	24.14	71623.50	21°58'43"(R)	1110.846
841	TP833	655151.152	2983388.837	88° 33' 47.410" E	26° 57' 49.786" N	7.70	71647.64	87°27'38"(L)	1112.711
842	TP834	655147.932	2983395.837	88° 33' 47.296" E	26° 57' 50.014" N	28.82	71655.34	87°52'26"(L)	1115.047
843	TP835	655122.015	2983383.228	88° 33' 46.351" E	26° 57' 49.615" N	32.78	71684.17	14°17'35"(L)	1118.412
844	TP836	655096.992	2983362.055	88° 33' 45.434" E	26° 57' 48.937" N	48.04	71716.95	17°16'11"(R)	1120.387
845	TP837	655052.764	2983343.312	88° 33' 43.822" E	26° 57' 48.346" N	30.16	71764.98	13°47'34"(R)	1123.789
846	TP838	655022.994	2983338.505	88° 33' 42.740" E	26° 57' 48.202" N	25.30	71795.14	43°31'15"(L)	1126.854
847	TP839	655007.663	2983318.385	88° 33' 42.175" E	26° 57' 47.554" N	34.46	71820.43	24°0'39"(L)	1128.655
848	TP840	654999.738	2983284.847	88° 33' 41.873" E	26° 57' 46.468" N	17.60	71854.89	88°34'1"(R)	1131.891
849	TP841	654982.516	2983288.465	88° 33' 41.250" E	26° 57' 46.592" N	65.53	71872.49	85°11'20"(R)	1133.875
850	TP842	654996.917	2983352.395	88° 33' 41.801" E	26° 57' 48.664" N	53.09	71938.02	57°37'32"(R)	1137.897
851	TP843	655046.905	2983370.273	88° 33' 43.622" E	26° 57' 49.224" N	105.21	71991.11	15°15'37"(L)	1138.997
852	TP844	655133.152	2983430.529	88° 33' 46.776" E	26° 57' 51.148" N	14.85	72096.32	27°17'7"(L)	1146.784
853	TP845	655140.072	2983443.668	88° 33' 47.033" E	26° 57' 51.572" N	22.36	72111.17	32°36'10"(L)	1147.856
854	TP846	655138.191	2983465.946	88° 33' 46.975" E	26° 57' 52.296" N	53.07	72133.53	16°22'27"(R)	1147.351
855	TP847	655148.813	2983517.941	88° 33' 47.383" E	26° 57' 53.981" N	37.05	72186.60	39°41'29"(L)	1149.267
856	TP848	655131.335	2983550.613	88° 33' 46.764" E	26° 57' 55.050" N	33.79	72223.65	23°2'14"(R)	1151.456
857	TP849	655128.327	2983584.273	88° 33' 46.670" E	26° 57' 56.145" N	16.62	72257.45	42°51'29"(L)	1152.028
858	TP850	655115.984	2983595.399	88° 33' 46.227" E	26° 57' 56.511" N	50.30	72274.06	23°33'57"(L)	1152.876

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S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
859	TP851	655068.279	2983611.332	88° 33' 44.505" E	26° 57' 57.048" N	25.96	72324.36	41°16'27"(R)	1153.856
860	TP852	655055.197	2983633.757	88° 33' 44.040" E	26° 57' 57.782" N	23.50	72350.32	38°10'36"(R)	1154.854
861	TP853	655058.434	2983657.029	88° 33' 44.168" E	26° 57' 58.537" N	18.29	72373.82	41°4'24"(L)	1156.756
862	TP854	655048.434	2983672.338	88° 33' 43.812" E	26° 57' 59.038" N	23.70	72392.10	25°42'49"(L)	1157.854
863	TP855	655028.148	2983684.591	88° 33' 43.082" E	26° 57' 59.445" N	17.53	72415.80	47°17'18"(R)	1158.154
864	TP856	655024.629	2983701.762	88° 33' 42.963" E	26° 58' 0.004" N	30.54	72433.33	16°52'55"(R)	1158.875
865	TP857	655027.452	2983732.173	88° 33' 43.078" E	26° 58' 0.991" N	28.55	72463.87	17°23'59"(R)	1160.456
866	TP858	655038.469	2983758.509	88° 33' 43.490" E	26° 58' 1.842" N	23.21	72492.42	22°14'19"(R)	1160.978
867	TP859	655054.867	2983774.941	88° 33' 44.092" E	26° 58' 2.369" N	66.94	72515.63	11°18'12"(L)	1162.024
868	TP860	655091.950	2983830.676	88° 33' 45.461" E	26° 58' 4.165" N	399.11	72582.58	19°53'45"(R)	1165.546
869	TP861	655412.912	2984067.887	88° 33' 57.206" E	26° 58' 11.743" N	212.22	72981.68	29°50'26"(R)	1182.020
870	TP862	655623.718	2984092.375	88° 34' 4.862" E	26° 58' 12.454" N	86.64	73193.91	21°8'42"(R)	1177.895
871	TP863	655707.591	2984070.654	88° 34' 7.893" E	26° 58' 11.714" N	56.22	73280.55	13°0'4"(R)	1173.854
872	TP864	655757.454	2984044.675	88° 34' 9.690" E	26° 58' 10.850" N	39.41	73336.77	10°33'50"(R)	1173.876
873	TP865	655788.472	2984020.368	88° 34' 10.803" E	26° 58' 10.048" N	27.13	73376.18	20°19'7"(L)	1174.581
874	TP866	655814.311	2984012.089	88° 34' 11.737" E	26° 58' 9.769" N	60.89	73403.31	2°21'12"(R)	1175.467
875	TP867	655871.482	2983991.146	88° 34' 13.800" E	26° 58' 9.065" N	50.10	73464.20	61°51'40"(L)	1180.038
876	TP868	655908.864	2984024.501	88° 34' 15.171" E	26° 58' 10.134" N	46.78	73514.30	22°37'54"(L)	1187.754
877	TP869	655929.096	2984066.679	88° 34' 15.923" E	26° 58' 11.496" N	19.41	73561.08	35°12'17"(R)	1191.887
878	TP870	655946.043	2984076.138	88° 34' 16.542" E	26° 58' 11.796" N	68.94	73580.49	50°10'9"(R)	1192.687
879	TP871	656010.406	2984051.432	88° 34' 18.865" E	26° 58' 10.968" N	47.70	73649.43	21°1'12"(R)	1197.998
880	TP872	656045.846	2984019.499	88° 34' 20.136" E	26° 58' 9.916" N	31.46	73697.13	71°23'55"(L)	1195.854
881	TP873	656073.259	2984034.932	88° 34' 21.137" E	26° 58' 10.406" N	63.83	73728.59	24°0'29"(R)	1196.016
882	TP874	656136.809	2984040.907	88° 34' 23.444" E	26° 58' 10.574" N	73.14	73792.42	21°15'31"(R)	1199.865
883	TP875	656207.155	2984020.884	88° 34' 25.986" E	26° 58' 9.895" N	38.37	73865.56	19°50'2"(R)	1202.867
884	TP876	656238.307	2983998.481	88° 34' 27.105" E	26° 58' 9.155" N	37.56	73903.93	30°24'22"(R)	1203.885
885	TP877	656253.509	2983964.129	88° 34' 27.641" E	26° 58' 8.033" N	42.11	73941.50	51°20'13"(L)	1206.876
886	TP878	656294.226	2983953.378	88° 34' 29.112" E	26° 58' 7.667" N	32.67	73983.61	16°55'52"(R)	1205.987
887	TP879	656322.014	2983936.201	88° 34' 30.112" E	26° 58' 7.097" N	103.80	74016.28	31°43'21"(L)	1206.546
888	TP880	656425.817	2983936.201	88° 34' 33.876" E	26° 58' 7.055" N	53.83	74120.08	29°27'25"(R)	1215.856
889	TP881	656472.688	2983909.729	88° 34' 35.564" E	26° 58' 6.176" N	48.39	74173.91	56°15'18"(L)	1219.854
890	TP882	656515.878	2983931.544	88° 34' 37.140" E	26° 58' 6.868" N	49.13	74222.30	53°6'18"(L)	1222.846
891	TP883	656524.492	2983979.917	88° 34' 37.474" E	26° 58' 8.436" N	43.87	74271.43	46°2'33"(L)	1226.856
892	TP884	656498.737	2984015.436	88° 34' 36.556" E	26° 58' 9.600" N	76.03	74315.31	56°4'41"(L)	1230.565
893	TP885	656422.755	2984012.752	88° 34' 33.800" E	26° 58' 9.544" N	61.87	74391.34	32°36'31"(R)	1234.856
894	TP886	656369.493	2984044.232	88° 34' 31.883" E	26° 58' 10.588" N	24.56	74453.21	32°49'23"(R)	1239.856
895	TP887	656358.499	2984066.195	88° 34' 31.494" E	26° 58' 11.306" N	40.56	74477.77	3°49'34"(R)	1241.987
896	TP888	656342.805	2984103.592	88° 34' 30.942" E	26° 58' 12.528" N	61.69	74518.32	8°15'21"(R)	1246.876
897	TP889	656327.349	2984163.314	88° 34' 30.408" E	26° 58' 14.474" N	40.17	74580.01	10°23'12"(R)	1249.985
898	TP890	656324.461	2984203.379	88° 34' 30.322" E	26° 58' 15.777" N	39.83	74620.18	9°43'41"(L)	1249.854
899	TP891	656314.925	2984242.053	88° 34' 29.993" E	26° 58' 17.038" N	31.48	74660.01	5°29'29"(L)	1250.848
900	TP892	656304.497	2984271.761	88° 34' 29.629" E	26° 58' 18.007" N	10.49	74691.50	15°19'20"(R)	1251.864
901	TP893	656303.761	2984282.229	88° 34' 29.607" E	26° 58' 18.348" N	18.14	74701.99	11°32'52"(R)	1251.974
902	TP894	656306.137	2984300.214	88° 34' 29.701" E	26° 58' 18.931" N	5.43	74720.14	34°33'0"(L)	1253.874
903	TP895	656303.670	2984305.053	88° 34' 29.614" E	26° 58' 19.089" N	49.97	74725.57	67°0'40"(L)	1252.987
904	TP896	656253.823	2984301.538	88° 34' 27.805" E	26° 58' 18.995" N	53.95	74775.54	39°22'11"(L)	1256.876
905	TP897	656214.625	2984264.465	88° 34' 26.367" E	26° 58' 17.807" N	22.08	74829.49	45°52'45"(R)	1260.580
906	TP898	656192.570	2984265.418	88° 34' 25.567" E	26° 58' 17.846" N	14.68	74851.57	14°52'32"(L)	1261.324
907	TP899	656178.227	2984262.265	88° 34' 25.046" E	26° 58' 17.750" N	39.86	74866.25	20°25'9"(L)	1261.758
908	TP900	656144.733	2984240.663	88° 34' 23.821" E	26° 58' 17.061" N	30.37	74906.11	23°41'22"(L)	1263.845
909	TP901	656127.975	2984215.337	88° 34' 23.202" E	26° 58' 16.245" N	19.81	74936.48	10°22'24"(R)	1263.985
910	TP902	656114.248	2984201.055	88° 34' 22.698" E	26° 58' 15.787" N	7.15	74956.28	26°16'18"(R)	1263.875
911	TP903	656107.527	2984198.627	88° 34' 22.453" E	26° 58' 15.711" N	15.18	74963.43	52°55'29"(R)	1263.879
912	TP904	656094.801	2984206.910	88° 34' 21.995" E	26° 58' 15.985" N	19.82	74978.62	36°52'59"(R)	1263.958
913	TP905	656088.003	2984225.533	88° 34' 21.757" E	26° 58' 16.593" N	52.65	74998.44	20°25'50"(L)	1265.854
914	TP906	656053.818	2984265.577	88° 34' 20.536" E	26° 58' 17.908" N	52.25	75051.09	27°9'0"(R)	1268.546
915	TP907	656041.766	2984316.415	88° 34' 20.122" E	26° 58' 19.564" N	30.60	75103.34	65°41'43"(L)	1270.856
916	TP908	656011.725	2984322.237	88° 34' 19.035" E	26° 58' 19.766" N	46.26	75133.94	44°6'17"(R)	1272.875
917	TP909	655985.238	2984360.166	88° 34' 18.092" E	26° 58' 21.009" N	19.28	75180.20	46°23'15"(L)	1275.854
918	TP910	655966.183	2984363.077	88° 34' 17.402" E	26° 58' 21.111" N	19.29	75199.48	22°1'14"(R)	1276.854
919	TP911	655949.593	2984372.930	88° 34' 16.805" E	26° 58' 21.438" N	19.93	75218.77	19°18'25"(R)	1277.984
920	TP912	655936.786	2984388.200	88° 34' 16.347" E	26° 58' 21.939" N	83.25	75238.70	36°10'53"(L)	1279.856
921	TP913	655855.951	2984408.102	88° 34' 13.425" E	26° 58' 22.619" N	32.47	75321.95	31°29'49"(L)	1286.686
922	TP914	655825.013	2984398.249	88° 34' 12.299" E	26° 58' 22.311" N	41.03	75354.42	15°2'23"(L)	1289.995
923	TP915	655790.489	2984376.081	88° 34' 11.037" E	26° 58' 21.605" N	17.16	75395.45	15°14'10"(R)	1292.875
924	TP916	655774.123	2984370.931	88° 34' 10.441" E	26° 58' 21.444" N	36.89	75412.61	44°56'26"(R)	1292.854

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
925	TP917	655741.391	2984387.949	88° 34' 9.262" E	26° 58' 22.010" N	61.23	75449.50	27°22'59"(R)	1293.985
926	TP918	655706.145	2984438.016	88° 34' 8.006" E	26° 58' 23.651" N	31.56	75510.73	9°3'20"(L)	1297.854
927	TP919	655684.143	2984460.640	88° 34' 7.219" E	26° 58' 24.395" N	8.30	75542.28	136°2'42"(L)	1300.544
928	TP920	655684.179	2984452.340	88° 34' 7.216" E	26° 58' 24.125" N	79.97	75550.58	32°58'41"(L)	1302.857
929	TP921	655727.995	2984385.443	88° 34' 8.775" E	26° 58' 21.934" N	64.24	75630.55	29°35'59"(L)	1306.857
930	TP922	655785.143	2984356.102	88° 34' 10.834" E	26° 58' 20.958" N	60.50	75694.79	48°34'38"(L)	1310.549
931	TP923	655841.474	2984378.179	88° 34' 12.887" E	26° 58' 21.652" N	16.01	75755.30	58°47'17"(R)	1313.854
932	TP924	655854.194	2984368.459	88° 34' 13.343" E	26° 58' 21.331" N	34.11	75771.30	35°35'4"(R)	1313.897
933	TP925	655864.183	2984335.842	88° 34' 13.691" E	26° 58' 20.267" N	52.94	75805.42	27°32'41"(L)	1315.756
934	TP926	655901.336	2984298.132	88° 34' 15.021" E	26° 58' 19.027" N	17.02	75858.35	41°59'37"(R)	1319.857
935	TP927	655902.102	2984281.130	88° 34' 15.041" E	26° 58' 18.474" N	14.42	75875.37	27°48'24"(R)	1320.857
936	TP928	655895.955	2984268.085	88° 34' 14.813" E	26° 58' 18.053" N	20.62	75889.79	20°50'54"(R)	1321.855
937	TP929	655881.106	2984253.783	88° 34' 14.268" E	26° 58' 17.594" N	20.95	75910.41	66°28'29"(R)	1321.875
938	TP930	655861.760	2984261.816	88° 34' 13.570" E	26° 58' 17.863" N	65.73	75931.36	43°25'0"(R)	1322.785
939	TP931	655834.989	2984321.852	88° 34' 12.626" E	26° 58' 19.825" N	13.87	75997.09	52°22'55"(L)	1326.985
940	TP932	655821.511	2984325.109	88° 34' 12.139" E	26° 58' 19.936" N	40.20	76010.96	33°9'26"(L)	1329.845
941	TP933	655783.638	2984311.644	88° 34' 10.759" E	26° 58' 19.514" N	116.09	76051.15	36°18'51"(R)	1330.988
942	TP934	655672.466	2984345.087	88° 34' 6.743" E	26° 58' 20.645" N	41.82	76167.25	52°55'23"(R)	1328.856
943	TP935	655657.934	2984384.299	88° 34' 6.234" E	26° 58' 21.925" N	23.30	76209.06	17°0'37"(L)	1331.785
944	TP936	655643.800	2984402.822	88° 34' 5.730" E	26° 58' 22.533" N	95.11	76232.36	22°33'59"(L)	1334.587
945	TP937	655561.509	2984450.502	88° 34' 2.767" E	26° 58' 24.115" N	73.54	76327.47	49°0'14"(R)	1348.580
946	TP938	655547.594	2984522.714	88° 34' 2.295" E	26° 58' 26.467" N	116.25	76401.01	21°22'59"(L)	1349.524
947	TP939	655485.490	2984620.987	88° 34' 0.087" E	26° 58' 29.685" N	109.12	76517.26	17°23'54"(R)	1360.870
948	TP940	655457.447	2984726.439	88° 33' 59.118" E	26° 58' 33.122" N	78.02	76626.38	15°26'18"(R)	1364.546
949	TP941	655458.190	2984804.454	88° 33' 59.180" E	26° 58' 35.657" N	126.15	76704.40	18°59'1"(R)	1366.546
950	TP942	655500.363	2984923.351	88° 34' 0.762" E	26° 58' 39.503" N	45.95	76830.55	20°53'42"(L)	1373.875
951	TP943	655499.268	2984969.283	88° 34' 0.743" E	26° 58' 40.996" N	51.55	76876.50	32°47'27"(R)	1377.548
952	TP944	655526.148	2985013.275	88° 34' 1.738" E	26° 58' 42.414" N	70.75	76928.05	28°59'41"(R)	1379.354
953	TP945	655587.679	2985048.201	88° 34' 3.985" E	26° 58' 43.524" N	59.63	76998.80	38°51'10"(L)	1383.874
954	TP946	655609.597	2985103.653	88° 34' 4.805" E	26° 58' 45.317" N	43.38	77058.43	57°17'40"(L)	1389.564
955	TP947	655584.266	2985138.870	88° 34' 3.902" E	26° 58' 46.471" N	64.99	77101.81	28°13'44"(R)	1393.784
956	TP948	655575.785	2985203.304	88° 34' 3.624" E	26° 58' 48.568" N	49.99	77166.80	20°52'53"(R)	1397.845
957	TP949	655587.355	2985251.936	88° 34' 4.065" E	26° 58' 50.144" N	34.10	77216.79	19°10'16"(L)	1400.997
958	TP950	655583.917	2985285.858	88° 34' 3.956" E	26° 58' 51.247" N	94.60	77250.89	3°43'22"(L)	1401.546
959	TP951	655568.286	2985379.155	88° 34' 3.431" E	26° 58' 54.285" N	53.38	77345.48	16°40'49"(R)	1396.877
960	TP952	655574.949	2985432.121	88° 34' 3.696" E	26° 58' 56.003" N	38.07	77398.87	30°35'29"(L)	1395.877
961	TP953	655559.814	2985467.058	88° 34' 3.163" E	26° 58' 57.144" N	29.38	77436.94	20°8'27"(R)	1395.877
962	TP954	655558.132	2985496.394	88° 34' 3.115" E	26° 58' 58.098" N	88.07	77466.33	29°28'19"(L)	1395.856
963	TP955	655510.485	2985570.461	88° 34' 1.421" E	26° 59' 0.524" N	78.60	77554.39	32°59'26"(L)	1399.755
964	TP956	655438.828	2985602.749	88° 33' 58.837" E	26° 59' 1.602" N	90.94	77632.99	10°0'43"(L)	1403.875
965	TP957	655350.681	2985625.126	88° 33' 55.650" E	26° 59' 2.364" N	23.05	77723.93	15°16'45"(R)	1410.854
966	TP958	655330.620	2985636.486	88° 33' 54.927" E	26° 59' 2.742" N	15.12	77746.99	80°13'46"(R)	1412.854
967	TP959	655335.732	2985650.720	88° 33' 55.119" E	26° 59' 3.202" N	56.47	77762.11	82°40'56"(R)	1413.547
968	TP960	655390.878	2985638.560	88° 33' 57.114" E	26° 59' 2.785" N	13.93	77818.58	23°25'33"(L)	1418.546
969	TP961	655404.553	2985641.216	88° 33' 57.611" E	26° 59' 2.866" N	7.74	77832.51	62°23'2"(L)	1418.857
970	TP962	655406.769	2985648.637	88° 33' 57.695" E	26° 59' 3.106" N	13.78	77840.26	66°38'41"(L)	1418.987
971	TP963	655396.211	2985657.490	88° 33' 57.316" E	26° 59' 3.398" N	32.44	77854.04	20°45'57"(L)	1421.577
972	TP964	655365.580	2985668.166	88° 33' 56.210" E	26° 59' 3.757" N	16.17	77886.47	34°49'53"(R)	1427.857
973	TP965	655356.088	2985681.254	88° 33' 55.871" E	26° 59' 4.186" N	11.88	77902.64	77°27'15"(R)	1428.546
974	TP966	655363.957	2985690.148	88° 33' 56.161" E	26° 59' 4.472" N	16.98	77914.52	47°48'6"(R)	1428.887
975	TP967	655380.937	2985690.355	88° 33' 56.777" E	26° 59' 4.472" N	68.67	77931.50	17°0'50"(R)	1429.871
976	TP968	655446.841	2985671.063	88° 33' 59.158" E	26° 59' 3.818" N	39.55	78000.17	12°5'56"(R)	1435.877
977	TP969	655481.631	2985652.241	88° 34' 0.411" E	26° 59' 3.193" N	30.02	78039.72	21°34'28"(R)	1437.887
978	TP970	655500.929	2985629.251	88° 34' 1.101" E	26° 59' 2.438" N	69.27	78069.74	34°54'29"(L)	1440.997
979	TP971	655567.816	2985611.226	88° 34' 3.518" E	26° 59' 1.825" N	125.06	78139.01	84°37'57"(L)	1445.687
980	TP972	655611.508	2985728.406	88° 34' 5.156" E	26° 59' 5.615" N	43.95	78264.07	32°6'29"(L)	1450.875
981	TP973	655602.626	2985771.453	88° 34' 4.853" E	26° 59' 7.017" N	54.11	78308.03	28°53'8"(R)	1452.857
982	TP974	655618.651	2985823.140	88° 34' 5.457" E	26° 59' 8.690" N	52.42	78362.14	35°40'44"(R)	1455.857
983	TP975	655660.464	2985854.756	88° 34' 6.988" E	26° 59' 9.700" N	55.19	78414.56	31°2'39"(R)	1460.877
984	TP976	655715.349	2985860.574	88° 34' 8.981" E	26° 59' 9.867" N	86.59	78469.75	56°8'35"(L)	1464.855
985	TP977	655755.740	2985937.161	88° 34' 10.480" E	26° 59' 12.339" N	49.26	78556.34	39°26'59"(R)	1469.545
986	TP978	655801.172	2985956.207	88° 34' 12.137" E	26° 59' 12.940" N	53.24	78605.60	29°38'35"(L)	1469.877
987	TP979	655854.028	2985949.811	88° 34' 14.051" E	26° 59' 12.711" N	41.60	78658.84	33°58'42"(L)	1472.851
988	TP980	655891.065	2985968.747	88° 34' 15.403" E	26° 59' 13.311" N	2.96	78700.44	61°30'6"(L)	1476.854
989	TP981	655889.928	2985971.484	88° 34' 15.363" E	26° 59' 13.400" N	28.39	78703.40	87°31'56"(L)	1476.546
990	TP982	655863.267	2985961.736	88° 34' 14.391" E	26° 59' 13.094" N	25.06	78731.79	9°32'18"(R)	1477.875

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
991	TP983	655838.630	2985957.149	88° 34' 13.496" E	26° 59' 12.955" N	19.51	78756.85	44°11'18"(R)	1479.455
992	TP984	655822.391	2985967.955	88° 34' 12.912" E	26° 59' 13.313" N	71.51	78776.36	39°25'13"(L)	1480.861
993	TP985	655751.241	2985960.755	88° 34' 10.328" E	26° 59' 13.108" N	72.73	78847.87	37°58'40"(L)	1486.850
994	TP986	655698.706	2985910.453	88° 34' 8.400" E	26° 59' 11.495" N	32.35	78920.60	1°12'38"(L)	1489.785
995	TP987	655675.815	2985887.589	88° 34' 7.559" E	26° 59' 10.761" N	20.69	78952.96	89°50'38"(R)	1492.875
996	TP988	655661.156	2985902.185	88° 34' 7.034" E	26° 59' 11.241" N	77.21	78973.64	89°40'26"(R)	1493.745
997	TP989	655715.320	2985957.204	88° 34' 9.024" E	26° 59' 13.007" N	30.73	79050.85	16°57'4"(L)	1500.546
998	TP990	655729.559	2985984.441	88° 34' 9.552" E	26° 59' 13.886" N	20.28	79081.58	37°35'30"(R)	1501.987
999	TP991	655747.965	2985992.948	88° 34' 10.224" E	26° 59' 14.155" N	29.52	79101.86	36°19'15"(L)	1507.784
1000	TP992	655762.216	2986018.796	88° 34' 10.752" E	26° 59' 14.989" N	79.39	79131.38	42°24'54"(R)	1506.854
1001	TP993	655837.411	2986044.269	88° 34' 13.491" E	26° 59' 15.786" N	9.34	79210.77	30°30'54"(L)	1514.546
1002	TP994	655843.509	2986051.341	88° 34' 13.715" E	26° 59' 16.014" N	80.35	79220.11	135°33'54"(L)	1515.887
1003	TP995	655763.444	2986044.626	88° 34' 10.808" E	26° 59' 15.828" N	41.96	79300.45	6°34'55"(L)	1525.874
1004	TP996	655722.307	2986036.349	88° 34' 9.313" E	26° 59' 15.575" N	41.82	79342.42	20°14'18"(L)	1528.787
1005	TP997	655686.689	2986014.424	88° 34' 8.011" E	26° 59' 14.878" N	35.90	79384.24	18°21'56"(L)	1533.872
1006	TP998	655663.605	2985986.933	88° 34' 7.161" E	26° 59' 13.994" N	38.90	79420.14	15°14'1"(L)	1537.317
1007	TP999	655631.642	2985964.763	88° 34' 5.992" E	26° 59' 13.286" N	28.54	79459.04	74°17'51"(R)	1541.622
1008	TP1000	655609.640	2985982.933	88° 34' 5.202" E	26° 59' 13.885" N	73.54	79487.57	78°45'55"(R)	1544.567
1009	TP1001	655644.521	2986047.670	88° 34' 6.497" E	26° 59' 15.975" N	132.62	79561.11	28°6'10"(R)	1551.852
1010	TP1002	655755.009	2986121.026	88° 34' 10.537" E	26° 59' 18.314" N	50.52	79693.73	13°53'43"(R)	1565.785
1011	TP1003	655802.575	2986138.044	88° 34' 12.270" E	26° 59' 18.847" N	53.19	79744.25	9°7'40"(R)	1570.564
1012	TP1004	655854.863	2986147.790	88° 34' 14.170" E	26° 59' 19.143" N	39.76	79797.44	15°19'47"(R)	1574.871
1013	TP1005	655894.487	2986144.482	88° 34' 15.606" E	26° 59' 19.019" N	38.21	79837.20	9°36'53"(L)	1575.867
1014	TP1006	655932.561	2986147.708	88° 34' 16.988" E	26° 59' 19.109" N	87.52	79875.41	26°3'56"(L)	1573.875
1015	TP1007	656007.656	2986192.666	88° 34' 19.732" E	26° 59' 20.539" N	177.89	79962.93	41°13'14"(L)	1571.998
1016	TP1008	656062.245	2986361.970	88° 34' 21.788" E	26° 59' 26.018" N	40.29	80140.82	9°37'37"(R)	1583.987
1017	TP1009	656080.846	2986397.705	88° 34' 22.479" E	26° 59' 27.171" N	38.81	80181.11	13°32'1"(R)	1586.561
1018	TP1010	656106.325	2986426.983	88° 34' 23.416" E	26° 59' 28.112" N	13.24	80219.92	47°57'50"(L)	1589.751
1019	TP1011	656104.205	2986440.047	88° 34' 23.345" E	26° 59' 28.537" N	5.26	80233.16	87°31'4"(L)	1058.419
1020	TP1011A	656108.195	2986436.627	88° 34' 23.489" E	26° 59' 28.425" N	28.53	80238.41	60°22'4"(R)	1058.419
1021	TP1012	656085.004	2986420.010	88° 34' 22.640" E	26° 59' 27.894" N	9.44	80266.94	85°15'48"(R)	1594.541
1022	TP1013	656076.944	2986424.934	88° 34' 22.350" E	26° 59' 28.057" N	272.98	80276.39	83°25'48"(L)	1594.911
1023	TP1014	655908.930	2986209.780	88° 34' 16.159" E	26° 59' 21.135" N	100.64	80549.37	42°54'31"(R)	1609.546
1024	TP1015	655809.561	2986193.863	88° 34' 12.548" E	26° 59' 20.658" N	58.45	80650.00	29°22'16"(R)	1614.546
1025	TP1016	655754.734	2986214.113	88° 34' 10.569" E	26° 59' 21.338" N	155.87	80708.45	35°28'17"(L)	1618.854
1026	TP1017	655604.313	2986173.245	88° 34' 5.095" E	26° 59' 20.071" N	42.66	80864.33	18°49'16"(L)	1629.581
1027	TP1018	655568.955	2986149.377	88° 34' 3.802" E	26° 59' 19.310" N	137.89	80906.99	17°43'44"(R)	1632.875
1028	TP1019	655436.604	2986110.695	88° 33' 58.985" E	26° 59' 18.106" N	33.98	81044.87	29°17'9"(R)	1640.865
1029	TP1020	655403.497	2986118.334	88° 33' 57.787" E	26° 59' 18.368" N	9.51	81078.85	48°18'50"(L)	1643.945
1030	TP1020A	655394.565	2986115.079	88° 33' 57.462" E	26° 59' 18.266" N	6.97	81088.36	36°23'42"(L)	1643.945
1031	TP1021	655390.713	2986109.276	88° 33' 57.320" E	26° 59' 18.079" N	9.54	81095.32	89°13"47"(L)	1642.855
1032	TP1022	655398.590	2986103.893	88° 33' 57.603" E	26° 59' 17.901" N	59.90	81104.86	72°10'38"(R)	1641.811
1033	TP1023	655381.551	2986046.469	88° 33' 56.959" E	26° 59' 16.042" N	24.92	81164.76	18°20'35"(R)	1640.853
1034	TP1024	655367.305	2986026.024	88° 33' 56.433" E	26° 59' 15.383" N	45.56	81189.68	15°12'13"(R)	1641.540
1035	TP1025	655332.364	2985996.781	88° 33' 55.153" E	26° 59' 14.447" N	45.90	81235.24	11°28'46"(L)	1643.995
1036	TP1026	655303.730	2985960.903	88° 33' 54.098" E	26° 59' 13.293" N	13.80	81281.15	57°18'48"(R)	1648.846
1037	TP1026A	655291.164	2985955.201	88° 33' 53.640" E	26° 59' 13.113" N	13.50	81294.95	61°22'49"(R)	1648.846
1038	TP1027	655280.381	2985963.319	88° 33' 53.252" E	26° 59' 13.381" N	98.13	81308.44	85°12'23"(R)	1650.846
1039	TP1028	655329.020	2986048.545	88° 33' 55.055" E	26° 59' 16.130" N	40.15	81406.57	19°10'22"(L)	1658.549
1040	TP1029	655336.365	2986088.015	88° 33' 55.339" E	26° 59' 17.410" N	119.52	81446.72	21°12'37"(L)	1660.145
1041	TP1030	655314.237	2986205.471	88° 33' 54.589" E	26° 59' 21.235" N	37.73	81566.24	28°21'4"(L)	1668.845
1042	TP1031	655290.484	2986234.783	88° 33' 53.741" E	26° 59' 22.197" N	15.12	81603.97	88°56'16"(L)	1669.948
1043	TP1031A	655275.943	2986230.641	88° 33' 53.212" E	26° 59' 22.068" N	12.03	81619.09	50°13'52"(L)	1669.948
1044	TP1032	655271.078	2986219.644	88° 33' 53.030" E	26° 59' 21.713" N	10.94	81631.12	80°40'43"(L)	1670.944
1045	TP1033	655280.230	2986213.658	88° 33' 53.359" E	26° 59' 21.515" N	140.16	81642.05	55°55'55"(R)	1681.654
1046	TP1034	655282.379	2986073.515	88° 33' 53.374" E	26° 59' 16.961" N	31.31	81782.21	15°2'6"(R)	1683.379
1047	TP1035	655274.723	2986043.160	88° 33' 53.083" E	26° 59' 15.977" N	28.32	81813.52	44°57'48"(R)	1684.840
1048	TP1036	655250.422	2986028.627	88° 33' 52.195" E	26° 59' 15.515" N	28.71	81841.83	65°18'37"(R)	1685.998
1049	TP1037	655226.739	2986044.861	88° 33' 51.344" E	26° 59' 16.052" N	34.92	81870.54	46°42'14"(R)	1687.871
1050	TP1038	655221.357	2986079.362	88° 33' 51.164" E	26° 59' 17.175" N	11.29	81905.46	89°48'50"(R)	1689.550
1051	TP1039	655232.502	2986081.138	88° 33' 51.569" E	26° 59' 17.228" N	109.97	81916.75	79°8'55"(L)	1689.995
1052	TP1040	655235.954	2986191.056	88° 33' 51.744" E	26° 59' 20.798" N	88.09	82026.72	18°32'3"(L)	1696.845
1053	TP1041	655210.589	2986275.411	88° 33' 50.862" E	26° 59' 23.549" N	164.20	82114.81	33°46'36"(L)	1701.998
1054	TP1042	655083.864	2986379.829	88° 33' 46.312" E	26° 59' 26.993" N	43.76	82279.01	39°23'12"(R)	1711.998
1055	TP1043	655075.420	2986422.770	88° 33' 46.025" E	26° 59' 28.391" N	142.09	82322.77	34°39'48"(R)	1714.894
1056	TP1044	655132.165	2986553.041	88° 33' 48.142" E	26° 59' 32.601" N	14.54	82464.86	80°6'39"(L)	1723.887

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
1057	TP1045	655118.688	2986558.485	88° 33' 47.656" E	26° 59' 32.784" N	36.70	82479.40	86°55'59"(L)	1723.857
1058	TP1046	655103.141	2986525.241	88° 33' 47.077" E	26° 59' 31.710" N	58.83	82516.10	25°2'38"(R)	1731.841
1059	TP1047	655058.007	2986487.513	88° 33' 45.423" E	26° 59' 30.502" N	31.88	82574.93	14°21'34"(L)	1739.287
1060	TP1048	655039.384	2986461.641	88° 33' 44.736" E	26° 59' 29.669" N	80.49	82606.80	14°31'4"(R)	1742.201
1061	TP1049	654977.485	2986410.189	88° 33' 42.468" E	26° 59' 28.022" N	36.74	82687.29	24°49'39"(L)	1747.995
1062	TP1050	654961.705	2986377.014	88° 33' 41.881" E	26° 59' 26.950" N	26.16	82724.03	41°39'13"(R)	1746.397
1063	TP1051	654937.608	2986366.831	88° 33' 41.002" E	26° 59' 26.629" N	85.05	82750.19	82°20'39"(L)	1746.977
1064	TP1052	654959.982	2986284.780	88° 33' 41.777" E	26° 59' 23.954" N	26.71	82835.24	28°23'38"(R)	1752.854
1065	TP1053	654953.909	2986258.771	88° 33' 41.545" E	26° 59' 23.112" N	19.96	82861.95	62°35'40"(R)	1755.188
1066	TP1054	654934.567	2986253.854	88° 33' 40.841" E	26° 59' 22.960" N	98.59	82881.90	76°7'58"(R)	1755.897
1067	TP1055	654888.082	2986340.799	88° 33' 39.194" E	26° 59' 25.803" N	47.06	82980.50	37°10'49"(R)	1762.845
1068	TP1056	654895.484	2986387.273	88° 33' 39.483" E	26° 59' 27.310" N	80.42	83027.56	36°41'33"(R)	1765.851
1069	TP1057	654953.079	2986443.396	88° 33' 41.598" E	26° 59' 29.111" N	44.42	83107.97	21°27'49"(L)	1771.847
1070	TP1058	654971.341	2986483.883	88° 33' 42.278" E	26° 59' 30.419" N	48.73	83152.39	43°25'34"(L)	1773.377
1071	TP1059	654955.356	2986529.918	88° 33' 41.719" E	26° 59' 31.921" N	64.52	83201.12	58°34'29"(L)	1775.957
1072	TP1060	654892.308	2986543.639	88° 33' 39.438" E	26° 59' 32.392" N	187.29	83265.64	13°56'34"(R)	1779.845
1073	TP1061	654724.290	2986626.388	88° 33' 33.382" E	26° 59' 35.148" N	287.34	83452.93	19°20'3"(R)	1792.845
1074	TP1062	654523.084	2986831.527	88° 33' 26.176" E	26° 59' 41.894" N	120.81	83740.28	18°3'39"(L)	1809.851
1075	TP1063	654415.914	2986887.301	88° 33' 22.314" E	26° 59' 43.749" N	51.21	83861.09	26°13'36"(R)	1814.984
1076	TP1064	654385.611	2986928.585	88° 33' 21.233" E	26° 59' 45.103" N	53.28	83912.30	34°56'23"(R)	1817.985
1077	TP1065	654384.365	2986981.853	88° 33' 21.212" E	26° 59' 46.834" N	17.78	83965.58	89°7'27"(L)	1819.564
1078	TP1066	654367.213	2986986.529	88° 33' 20.592" E	26° 59' 46.993" N	117.21	83983.36	85°26'22"(R)	1820.984
1079	TP1067	654388.952	2987101.706	88° 33' 21.432" E	26° 59' 50.726" N	33.38	84100.57	20°51'44"(L)	1826.894
1080	TP1068	654383.057	2987134.559	88° 33' 21.233" E	26° 59' 51.796" N	59.07	84133.95	46°10'18"(R)	1827.861
1081	TP1069	654417.774	2987182.346	88° 33' 22.513" E	26° 59' 53.335" N	77.74	84193.02	66°24'37"(L)	1831.785
1082	TP1070	654378.420	2987249.391	88° 33' 21.116" E	26° 59' 55.529" N	90.91	84270.76	88°19'45"(R)	1833.845
1083	TP1071	654455.446	2987297.678	88° 33' 23.931" E	26° 59' 57.067" N	83.00	84361.67	40°20'34"(R)	1832.843
1084	TP1072	654537.581	2987285.754	88° 33' 26.905" E	26° 59' 56.647" N	24.77	84444.66	34°39'50"(L)	1824.723
1085	TP1073	654559.769	2987296.770	88° 33' 27.715" E	26° 59' 56.996" N	44.03	84469.44	124°2'38"(L)	1822.875
1086	TP1074	654521.469	2987318.485	88° 33' 26.335" E	26° 59' 57.716" N	71.35	84513.46	35°39'15"(R)	1815.997
1087	TP1075	654491.548	2987383.259	88° 33' 25.279" E	26° 59' 59.833" N	41.16	84584.82	37°22'26"(L)	1810.380
1088	TP1076	654455.153	2987402.474	88° 33' 23.968" E	27° 0' 0.472" N	67.79	84625.97	45°49'3"(R)	1807.510
1089	TP1077	654436.070	2987467.524	88° 33' 23.305" E	27° 0' 2.593" N	42.84	84693.76	41°53'14"(R)	1804.615
1090	TP1078	654454.538	2987506.179	88° 33' 23.992" E	27° 0' 3.842" N	48.06	84736.60	56°22'39"(L)	1800.129
1091	TP1079	654429.899	2987547.446	88° 33' 23.116" E	27° 0' 5.192" N	95.54	84784.67	9°37'50"(R)	1795.237
1092	TP1080	654395.335	2987636.512	88° 33' 21.903" E	27° 0' 8.100" N	57.93	84880.20	23°3'26"(L)	1786.773
1093	TP1081	654354.899	2987677.997	88° 33' 20.454" E	27° 0' 9.464" N	35.98	84938.13	37°48'8"(R)	1784.317
1094	TP1082	654350.848	2987713.746	88° 33' 20.324" E	27° 0' 10.627" N	40.10	84974.11	20°30'59"(R)	1784.482
1095	TP1083	654360.584	2987752.644	88° 33' 20.694" E	27° 0' 11.887" N	59.37	85014.21	30°43'16"(R)	1783.389
1096	TP1084	654402.400	2987794.793	88° 33' 22.230" E	27° 0' 13.240" N	87.47	85073.58	15°38'24"(R)	1780.782
1097	TP1085	654478.463	2987837.980	88° 33' 25.008" E	27° 0' 14.613" N	105.64	85161.05	21°31'38"(L)	1775.280
1098	TP1086	654544.783	2987920.211	88° 33' 27.450" E	27° 0' 17.258" N	122.21	85266.69	16°40'50"(L)	1771.940
1099	TP1087	654590.969	2988033.356	88° 33' 29.176" E	27° 0' 20.915" N	87.24	85388.90	21°40'34"(R)	1761.016
1100	TP1088	654651.440	2988096.235	88° 33' 31.398" E	27° 0' 22.934" N	153.26	85476.14	9°56'27"(L)	1758.244
1101	TP1089	654737.011	2988223.381	88° 33' 34.559" E	27° 0' 27.031" N	53.15	85629.40	28°28'54"(L)	1750.937
1102	TP1089A	654734.386	2988276.463	88° 33' 34.488" E	27° 0' 28.757" N	17.31	85682.55	34°33'45"(R)	1750.937
1103	TP1090	654743.491	2988291.188	88° 33' 34.825" E	27° 0' 29.231" N	16.45	85699.86	88°40'12"(R)	1749.004
1104	TP1091	654757.677	2988282.865	88° 33' 35.335" E	27° 0' 28.955" N	89.96	85716.31	86°26'54"(L)	1746.692
1105	TP1092	654807.919	2988357.483	88° 33' 37.191" E	27° 0' 31.359" N	215.39	85806.26	19°54'4"(L)	1745.247
1106	TP1093	654860.217	2988566.433	88° 33' 39.182" E	27° 0' 38.127" N	170.39	86021.66	21°9'0"(L)	1741.910
1107	TP1094	654839.162	2988735.520	88° 33' 38.494" E	27° 0' 43.630" N	204.77	86192.05	21°45'45"(R)	1738.842
1108	TP1095	654891.001	2988933.620	88° 33' 40.464" E	27° 0' 50.045" N	354.19	86396.82	18°21'3"(R)	1734.367
1109	TP1096	655083.986	2989230.617	88° 33' 47.598" E	27° 0' 59.617" N	150.34	86751.01	6°51'36"(R)	1709.764
1110	TP1096A	655181.715	2989344.857	88° 33' 51.195" E	27° 1' 3.289" N	11.42	86901.35	9°32'15"(R)	1709.764
1111	TP1097	655187.597	2989354.643	88° 33' 51.412" E	27° 1' 3.605" N	8.41	86912.77	89°46'0"(L)	1699.441
1112	TP1098	655181.285	2989360.208	88° 33' 51.186" E	27° 1' 3.788" N	59.41	86921.18	89°23'21"(R)	1699.187
1113	TP1099	655220.097	2989405.192	88° 33' 52.614" E	27° 1' 5.234" N	94.18	86980.60	13°12'50"(L)	1697.585
1114	TP1100	655263.689	2989488.671	88° 33' 54.233" E	27° 1' 7.929" N	34.11	87074.77	45°15'13"(L)	1691.591
1115	TP1101	655253.329	2989521.172	88° 33' 53.872" E	27° 1' 8.989" N	28.02	87108.88	36°22'18"(R)	1688.198
1116	TP1102	655262.309	2989547.714	88° 33' 54.210" E	27° 1' 9.848" N	34.52	87136.90	37°22'29"(R)	1687.102
1117	TP1103	655290.949	2989566.983	88° 33' 55.257" E	27° 1' 10.462" N	21.53	87171.42	19°28'10"(R)	1686.016
1118	TP1104	655311.795	2989572.361	88° 33' 56.016" E	27° 1' 10.629" N	42.26	87192.95	18°44'45"(L)	1686.762
1119	TP1105	655347.150	2989595.505	88° 33' 57.309" E	27° 1' 11.366" N	36.58	87235.21	5°15'15"(L)	1688.181
1120	TP1106	655375.789	2989618.256	88° 33' 58.358" E	27° 1' 12.094" N	31.48	87271.78	18°38'3"(R)	1689.565
1121	TP1107	655405.401	2989628.935	88° 33' 59.437" E	27° 1' 12.429" N	19.40	87303.26	7°26'47"(L)	1688.489
1122	TP1108	655422.645	2989637.826	88° 34' 0.067" E	27° 1' 12.711" N	74.06	87322.66	7°21'47"(L)	1687.369

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
1123	TP1109	655483.575	2989679.921	88° 34' 2.296" E	27° 1' 14.054" N	61.45	87396.72	48°29'41"(R)	1683.543
1124	TP1110	655543.233	2989665.206	88° 34' 4.454" E	27° 1' 13.552" N	61.13	87458.17	39°55'58"(L)	1682.711
1125	TP1111	655598.140	2989692.078	88° 34' 6.458" E	27° 1' 14.403" N	62.19	87519.30	19°26'14"(R)	1679.670
1126	TP1112	655659.912	2989699.269	88° 34' 8.702" E	27° 1' 14.612" N	128.45	87581.49	51°44'28"(L)	1675.168
1127	TP1113	655727.254	2989808.652	88° 34' 11.194" E	27° 1' 18.138" N	102.09	87709.94	10°18'54"(R)	1667.375
1128	TP1114	655795.479	2989884.600	88° 34' 13.704" E	27° 1' 20.578" N	9.54	87812.03	77°1'24"(R)	1661.877
1129	TP1115	655803.827	2989879.981	88° 34' 14.005" E	27° 1' 20.425" N	32.97	87821.57	77°46'57"(L)	1662.532
1130	TP1116	655825.531	2989904.795	88° 34' 14.803" E	27° 1' 21.222" N	62.38	87854.54	19°57'41"(R)	1658.455
1131	TP1117	655880.165	2989934.910	88° 34' 16.799" E	27° 1' 22.178" N	80.18	87916.92	25°7'49"(L)	1655.251
1132	TP1118	655927.301	2989999.772	88° 34' 18.538" E	27° 1' 24.267" N	144.09	87997.10	15°41'28"(R)	1649.673
1133	TP1119	656040.377	2990089.083	88° 34' 22.681" E	27° 1' 27.123" N	81.99	88141.19	17°38'10"(L)	1058.419
1134	TP1120	656086.297	2990157.007	88° 34' 24.378" E	27° 1' 29.311" N	77.95	88223.18	27°7'41"(R)	1058.419
1135	TP1121	656154.595	2990194.571	88° 34' 26.872" E	27° 1' 30.504" N	35.20	88301.13	15°25'10"(R)	1058.419
1136	TP1122	656188.840	2990202.723	88° 34' 28.118" E	27° 1' 30.755" N	38.13	88336.33	25°6'37"(L)	1636.081
1137	TP1123	656218.683	2990226.463	88° 34' 29.212" E	27° 1' 31.514" N	28.64	88374.46	37°28'51"(R)	1058.419
1138	TP1124	656247.321	2990226.973	88° 34' 30.251" E	27° 1' 31.519" N	42.12	88403.11	50°9'22"(R)	1631.969
1139	TP1125	656274.881	2990195.118	88° 34' 31.236" E	27° 1' 30.473" N	28.45	88445.23	57°55'3"(L)	1058.419
1140	TP1126	656302.998	2990199.462	88° 34' 32.259" E	27° 1' 30.602" N	88.62	88473.68	57°36'1"(R)	1058.419
1141	TP1127	656361.349	2990132.766	88° 34' 34.345" E	27° 1' 28.412" N	23.11	88562.30	13°52'43"(L)	1058.419
1142	TP1128	656380.295	2990119.530	88° 34' 35.027" E	27° 1' 27.974" N	33.43	88585.41	26°58'26"(L)	1058.419
1143	TP1129	656413.399	2990114.897	88° 34' 36.225" E	27° 1' 27.810" N	28.12	88618.84	30°50'27"(R)	1058.419
1144	TP1130	656435.311	2990097.275	88° 34' 37.012" E	27° 1' 27.229" N	23.06	88646.96	79°29'2"(L)	1058.419
1145	TP1131	656450.715	2990114.438	88° 34' 37.579" E	27° 1' 27.780" N	19.13	88670.02	89°55'38"(L)	1614.588
1146	TP1132	656436.495	2990127.234	88° 34' 37.069" E	27° 1' 28.201" N	37.56	88689.15	16°29'31"(L)	1613.316
1147	TP1133	656402.591	2990143.397	88° 34' 35.846" E	27° 1' 28.740" N	29.90	88726.71	58°39'18"(R)	1611.009
1148	TP1134	656399.540	2990173.142	88° 34' 35.749" E	27° 1' 29.708" N	31.19	88756.61	16°9'32"(L)	1608.975
1149	TP1135	656387.848	2990202.060	88° 34' 35.338" E	27° 1' 30.652" N	29.79	88787.80	38°49'18"(R)	1605.886
1150	TP1136	656396.461	2990230.575	88° 34' 35.663" E	27° 1' 31.575" N	44.14	88817.59	36°18'28"(L)	1604.751
1151	TP1137	656381.726	2990272.183	88° 34' 35.148" E	27° 1' 32.933" N	21.53	88861.73	33°17'2"(L)	1601.807
1152	TP1138	656364.582	2990285.204	88° 34' 34.532" E	27° 1' 33.363" N	24.51	88883.26	33°1'4"(L)	1600.579
1153	TP1139	656340.138	2990286.998	88° 34' 33.646" E	27° 1' 33.431" N	28.14	88907.77	82°36'22"(R)	1598.332
1154	TP1140	656338.569	2990315.099	88° 34' 33.601" E	27° 1' 34.345" N	27.07	88935.91	19°25'57"(L)	1596.094
1155	TP1141	656328.155	2990340.082	88° 34' 33.235" E	27° 1' 35.161" N	23.06	88962.98	64°48'27"(R)	1593.809
1156	TP1142	656343.636	2990357.169	88° 34' 33.804" E	27° 1' 35.710" N	12.33	88986.03	42°10'44"(L)	1593.021
1157	TP1143	656343.636	2990369.501	88° 34' 33.810" E	27° 1' 36.111" N	13.17	88998.37	11°26'27"(L)	1591.950
1158	TP1144	656341.024	2990382.406	88° 34' 33.721" E	27° 1' 36.531" N	17.53	89011.53	21°58'35"(L)	1590.808
1159	TP1145	656331.371	2990397.037	88° 34' 33.377" E	27° 1' 37.010" N	25.96	89029.06	12°44'48"(L)	1589.176
1160	TP1146	656312.648	2990415.014	88° 34' 32.706" E	27° 1' 37.602" N	42.01	89055.02	171°18'53"(R)	1585.750
1161	TP1147	656346.997	2990390.827	88° 34' 33.942" E	27° 1' 36.802" N	53.73	89097.03	39°11'2"(L)	1584.936
1162	TP1148	656360.762	2990338.888	88° 34' 34.417" E	27° 1' 35.109" N	12.64	89150.76	13°38'55"(L)	1582.341
1163	TP1149	656366.794	2990327.774	88° 34' 34.631" E	27° 1' 34.745" N	78.53	89163.41	36°24'57"(L)	1581.338
1164	TP1150	656437.909	2990294.474	88° 34' 37.196" E	27° 1' 33.635" N	14.94	89241.93	51°51'3"(L)	1576.108
1165	TP1151	656451.247	2990301.199	88° 34' 37.683" E	27° 1' 33.848" N	22.01	89256.87	27°16'25"(L)	1573.868
1166	TP1152	656464.174	2990319.012	88° 34' 38.160" E	27° 1' 34.421" N	7.64	89278.88	83°8'27"(L)	1571.903
1167	TP1153	656458.570	2990324.206	88° 34' 37.959" E	27° 1' 34.592" N	17.72	89286.52	56°57'31"(R)	1571.558
1168	TP1154	656459.408	2990341.908	88° 34' 37.998" E	27° 1' 35.167" N	18.33	89304.24	71°37'6"(L)	1569.077
1169	TP1155	656442.305	2990348.504	88° 34' 37.380" E	27° 1' 35.388" N	13.96	89322.57	44°41'6"(L)	1568.004
1170	TP1156	656429.509	2990342.915	88° 34' 36.913" E	27° 1' 35.212" N	15.80	89336.53	39°25'26"(R)	1567.616
1171	TP1157	656414.310	2990347.225	88° 34' 36.364" E	27° 1' 35.358" N	16.25	89352.33	40°26'55"(R)	1566.695
1172	TP1158	656405.289	2990360.741	88° 34' 36.043" E	27° 1' 35.801" N	12.19	89368.58	12°29'46"(R)	1566.116
1173	TP1159	656400.876	2990372.103	88° 34' 35.888" E	27° 1' 36.172" N	32.92	89380.77	13°31'2"(R)	1564.881
1174	TP1160	656396.461	2990404.724	88° 34' 35.742" E	27° 1' 37.234" N	35.42	89413.69	32°15'54"(L)	1562.199
1175	TP1161	656373.704	2990431.871	88° 34' 34.929" E	27° 1' 38.125" N	25.02	89449.11	10°32'48"(R)	1560.091
1176	TP1162	656361.411	2990453.664	88° 34' 34.493" E	27° 1' 38.838" N	18.36	89474.13	0°28'14"(L)	1558.082
1177	TP1163	656352.261	2990469.578	88° 34' 34.168" E	27° 1' 39.359" N	29.01	89492.49	34°41'51"(L)	1557.042
1178	TP1164	656326.061	2990482.022	88° 34' 33.223" E	27° 1' 39.774" N	35.78	89521.50	14°34'47"(L)	1553.833
1179	TP1165	656290.914	2990488.743	88° 34' 31.951" E	27° 1' 40.006" N	35.51	89557.28	55°12'1"(R)	1551.856
1180	TP1166	656276.487	2990521.185	88° 34' 31.443" E	27° 1' 41.066" N	8.77	89592.79	43°46'11"(L)	1549.132
1181	TP1167	656268.367	2990524.508	88° 34' 31.150" E	27° 1' 41.177" N	12.02	89601.56	40°50'28"(L)	1548.136
1182	TP1168	656256.977	2990520.678	88° 34' 30.735" E	27° 1' 41.058" N	18.16	89613.58	11°47'57"(R)	1547.311
1183	TP1169	656238.945	2990518.533	88° 34' 30.079" E	27° 1' 40.995" N	17.34	89631.74	32°0'1"(R)	1546.073
1184	TP1170	656223.261	2990525.918	88° 34' 29.514" E	27° 1' 41.242" N	14.28	89649.07	53°15'34"(L)	1544.419
1185	TP1171	656210.658	2990519.204	88° 34' 29.053" E	27° 1' 41.029" N	12.92	89663.35	7°33'14"(R)	1543.340
1186	TP1172	656198.555	2990514.681	88° 34' 28.612" E	27° 1' 40.886" N	15.56	89676.27	59°28'32"(R)	1542.458
1187	TP1173	656186.459	2990524.470	88° 34' 28.178" E	27° 1' 41.209" N	7.86	89691.83	45°4'7"(R)	1540.920
1188	TP1174	656185.645	2990532.287	88° 34' 28.152" E	27° 1' 41.464" N	8.51	89699.69	25°42'37"(R)	1540.716

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
1189	TP1175	656188.522	2990540.293	88° 34' 28.260" E	27° 1' 41.723" N	12.40	89708.20	23°2'39"(R)	1540.662
1190	TP1176	656196.949	2990549.391	88° 34' 28.570" E	27° 1' 42.015" N	23.07	89720.60	22°0'4"(R)	1539.160
1191	TP1177	656217.821	2990559.209	88° 34' 29.331" E	27° 1' 42.325" N	25.83	89743.67	22°10'48"(R)	1538.562
1192	TP1178	656243.615	2990560.565	88° 34' 30.268" E	27° 1' 42.359" N	15.21	89769.50	42°5'15"(R)	1536.430
1193	TP1179	656255.425	2990550.976	88° 34' 30.692" E	27° 1' 42.043" N	9.72	89784.71	63°2'47"(L)	1534.875
1194	TP1180	656264.311	2990554.926	88° 34' 31.016" E	27° 1' 42.167" N	22.82	89794.43	65°48'2"(L)	1533.121
1195	TP1181	656264.403	2990577.742	88° 34' 31.030" E	27° 1' 42.909" N	58.64	89817.25	47°3'3"(R)	1530.244
1196	TP1182	656307.487	2990617.526	88° 34' 32.611" E	27° 1' 44.184" N	32.70	89875.89	21°11'53"(L)	1524.121
1197	TP1183	656321.863	2990646.894	88° 34' 33.146" E	27° 1' 45.132" N	76.41	89908.59	38°35'0"(L)	1519.835
1198	TP1184	656305.322	2990721.496	88° 34' 32.580" E	27° 1' 47.563" N	53.70	89985.00	48°46'58"(L)	1509.979
1199	TP1185	656258.226	2990747.297	88° 34' 30.883" E	27° 1' 48.420" N	10.27	90038.70	24°56'49"(R)	1503.054
1200	TP1186	656252.143	2990755.567	88° 34' 30.666" E	27° 1' 48.691" N	20.35	90048.97	34°42'51"(R)	1501.760
1201	TP1187	656251.567	2990775.906	88° 34' 30.654" E	27° 1' 49.352" N	12.19	90069.32	22°25'2"(R)	1499.837
1202	TP1188	656255.893	2990787.297	88° 34' 30.816" E	27° 1' 49.721" N	17.84	90081.50	30°30'31"(R)	1499.968
1203	TP1189	656269.818	2990798.452	88° 34' 31.326" E	27° 1' 50.077" N	15.91	90099.34	49°26'33"(R)	1500.496
1204	TP1190	656285.446	2990795.487	88° 34' 31.892" E	27° 1' 49.975" N	33.45	90115.25	20°25'1"(L)	1501.811
1205	TP1191	656318.419	2990801.106	88° 34' 33.091" E	27° 1' 50.144" N	30.35	90148.70	21°7'53"(L)	1504.388
1206	TP1192	656344.488	2990816.648	88° 34' 34.044" E	27° 1' 50.638" N	26.49	90179.05	9°7'9"(L)	1505.768
1207	TP1193	656364.804	2990833.648	88° 34' 34.789" E	27° 1' 51.182" N	13.29	90205.54	39°36'37"(L)	1507.449
1208	TP1194	656367.219	2990846.717	88° 34' 34.882" E	27° 1' 51.606" N	32.38	90218.83	57°55'34"(L)	1508.830
1209	TP1195	656343.364	2990868.608	88° 34' 34.027" E	27° 1' 52.327" N	24.69	90251.21	10°59'13"(R)	1510.255
1210	TP1196	656328.687	2990888.463	88° 34' 33.503" E	27° 1' 52.978" N	17.05	90275.90	7°39'26"(R)	1511.259
1211	TP1197	656320.471	2990903.399	88° 34' 33.212" E	27° 1' 53.467" N	12.85	90292.95	33°5'20"(R)	1511.533
1212	TP1198	656321.429	2990916.213	88° 34' 33.252" E	27° 1' 53.883" N	75.58	90305.80	20°11'24"(R)	1512.495
1213	TP1199	656352.730	2990985.008	88° 34' 34.419" E	27° 1' 56.105" N	36.00	90381.38	12°51'29"(L)	1516.418
1214	TP1200	656359.973	2991020.274	88° 34' 34.698" E	27° 1' 57.248" N	131.19	90417.38	1°25'4"(L)	1518.123
1215	TP1201	656383.180	2991149.398	88° 34' 35.599" E	27° 2' 1.434" N	70.58	90548.57	33°9'33"(R)	1518.229
1216	TP1202	656431.631	2991200.726	88° 34' 37.380" E	27° 2' 3.082" N	46.73	90619.15	38°9'30"(L)	1518.680
1217	TP1203	656435.858	2991247.262	88° 34' 37.554" E	27° 2' 4.592" N	101.78	90665.88	3°37'27"(L)	1516.266
1218	TP1204	656438.638	2991349.002	88° 34' 37.701" E	27° 2' 7.896" N	27.05	90767.66	11°15'58"(R)	1510.265
1219	TP1205	656444.646	2991375.376	88° 34' 37.931" E	27° 2' 8.751" N	98.49	90794.71	15°56'8"(R)	1509.993
1220	TP1206	656492.044	2991461.709	88° 34' 39.690" E	27° 2' 11.537" N	34.63	90893.20	6°52'30"(R)	1511.444
1221	TP1207	656512.225	2991489.853	88° 34' 40.435" E	27° 2' 12.443" N	23.07	90927.83	13°4'6"(R)	1511.761
1222	TP1208	656529.561	2991505.078	88° 34' 41.071" E	27° 2' 12.930" N	59.01	90950.90	14°59'2"(R)	1512.326
1223	TP1209	656582.456	2991531.227	88° 34' 43.002" E	27° 2' 13.758" N	25.20	91009.91	10°7'41"(R)	1512.635
1224	TP1210	656606.661	2991538.249	88° 34' 43.884" E	27° 2' 13.977" N	16.75	91035.11	18°44'41"(R)	1512.183
1225	TP1211	656623.390	2991537.499	88° 34' 44.490" E	27° 2' 13.946" N	30.82	91051.86	4°8'34"(L)	1511.516
1226	TP1212	656654.199	2991538.346	88° 34' 45.608" E	27° 2' 13.961" N	15.93	91082.68	17°47'22"(L)	1510.515
1227	TP1213	656669.227	2991543.628	88° 34' 46.156" E	27° 2' 14.126" N	28.06	91098.61	30°35'1"(L)	1509.888
1228	TP1214	656687.280	2991565.104	88° 34' 46.821" E	27° 2' 14.816" N	27.92	91126.66	19°25'41"(L)	1508.631
1229	TP1215	656697.113	2991591.233	88° 34' 47.190" E	27° 2' 15.661" N	78.46	91154.58	2°38'42"(L)	1507.169
1230	TP1216	656721.329	2991665.858	88° 34' 48.102" E	27° 2' 18.076" N	34.09	91233.04	0°50'26"(R)	1502.735
1231	TP1217	656732.326	2991698.127	88° 34' 48.516" E	27° 2' 19.120" N	21.58	91267.13	2°49'38"(R)	1501.686
1232	TP1218	656740.286	2991718.185	88° 34' 48.814" E	27° 2' 19.769" N	35.22	91288.71	4°43'34"(R)	1501.337
1233	TP1219	656755.929	2991749.737	88° 34' 49.396" E	27° 2' 20.787" N	94.05	91323.92	1°36'32"(R)	1500.850
1234	TP1220	656800.055	2991832.794	88° 34' 51.035" E	27° 2' 23.468" N	38.02	91417.97	9°3'25"(L)	1498.376
1235	TP1221	656812.387	2991868.763	88° 34' 51.498" E	27° 2' 24.631" N	27.73	91456.00	18°1'29"(R)	1496.632
1236	TP1222	656829.055	2991890.923	88° 34' 52.113" E	27° 2' 25.345" N	56.47	91483.73	14°3'46"(R)	1496.724
1237	TP1223	656872.946	2991926.451	88° 34' 53.722" E	27° 2' 26.481" N	14.14	91540.20	20°4'25"(L)	1498.127
1238	TP1224	656880.215	2991938.578	88° 34' 53.991" E	27° 2' 26.872" N	31.86	91554.33	7°24'33"(L)	1498.293
1239	TP1225	656892.932	2991967.786	88° 34' 54.466" E	27° 2' 27.816" N	25.69	91586.19	5°57'13"(R)	1497.699
1240	TP1226	656905.577	2991990.152	88° 34' 54.935" E	27° 2' 28.537" N	60.35	91611.88	7°40'1"(R)	1497.581
1241	TP1227	656942.023	2992038.258	88° 34' 56.279" E	27° 2' 30.086" N	56.27	91672.24	14°45'25"(R)	1497.379
1242	TP1228	656986.304	2992072.971	88° 34' 57.902" E	27° 2' 31.195" N	35.41	91728.50	8°27'28"(L)	1498.469
1243	TP1229	657010.654	2992098.677	88° 34' 58.797" E	27° 2' 32.021" N	37.88	91763.91	35°47'51"(L)	1499.784
1244	TP1230	657015.697	2992136.216	88° 34' 58.997" E	27° 2' 33.238" N	101.19	91801.79	21°26'39"(R)	1501.656
1245	TP1231	657064.904	2992224.641	88° 35' 0.823" E	27° 2' 36.091" N	12.71	91902.98	8°15'42"(L)	1504.448
1246	TP1232	657069.424	2992236.519	88° 35' 0.992" E	27° 2' 36.475" N	10.65	91915.69	16°9'57"(L)	1504.409
1247	TP1233	657070.291	2992247.136	88° 35' 1.029" E	27° 2' 36.820" N	15.58	91926.34	9°33'25"(L)	1504.130
1248	TP1234	657068.963	2992262.663	88° 35' 0.988" E	27° 2' 37.325" N	61.04	91941.93	23°10'57"(L)	1503.673
1249	TP1235	657040.241	2992316.518	88° 34' 59.970" E	27° 2' 39.086" N	22.29	92002.96	23°1'22"(R)	1500.486
1250	TP1236	657038.280	2992338.722	88° 34' 59.909" E	27° 2' 39.808" N	10.26	92025.25	23°35'15"(R)	1498.411
1251	TP1237	657041.542	2992348.449	88° 35' 0.032" E	27° 2' 40.123" N	25.44	92035.51	58°32'49"(L)	1497.151
1252	TP1238	657025.186	2992367.935	88° 34' 59.447" E	27° 2' 40.763" N	16.21	92060.95	40°0'30"(R)	1497.502
1253	TP1239	657025.186	2992384.146	88° 34' 59.454" E	27° 2' 41.290" N	53.22	92077.16	13°24'36"(R)	1497.712
1254	TP1240	657037.529	2992435.916	88° 34' 59.926" E	27° 2' 42.967" N	37.33	92130.38	20°40'30"(R)	1497.995

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
1255	TP1241	657058.452	2992466.836	88° 35' 0.699" E	27° 2' 43.963" N	20.28	92167.72	20°2'27"(L)	1497.889
1256	TP1242	657063.372	2992486.505	88° 35' 0.887" E	27° 2' 44.600" N	27.21	92187.99	38°5'21"(L)	1497.003
1257	TP1243	657052.285	2992511.354	88° 35' 0.496" E	27° 2' 45.412" N	51.26	92215.20	31°32'43"(R)	1496.721
1258	TP1244	657058.976	2992562.172	88° 35' 0.762" E	27° 2' 47.060" N	56.72	92266.46	36°24'20"(R)	1495.671
1259	TP1245	657098.308	2992603.037	88° 35' 2.208" E	27° 2' 48.372" N	96.43	92323.18	7°1'49"(L)	1496.292
1260	TP1246	657156.172	2992680.172	88° 35' 4.342" E	27° 2' 50.854" N	254.14	92419.60	4°8'49"(L)	1497.712
1261	TP1247	657293.576	2992893.967	88° 35' 9.426" E	27° 2' 57.744" N	23.76	92673.75	8°57'35"(L)	1507.071
1262	TP1248	657303.153	2992915.715	88° 35' 9.783" E	27° 2' 58.447" N	34.25	92697.51	11°7'10"(R)	1507.881
1263	TP1249	657322.743	2992943.809	88° 35' 10.507" E	27° 2' 59.352" N	64.23	92731.76	26°4'11"(L)	1509.636
1264	TP1250	657332.590	2993007.281	88° 35' 10.893" E	27° 3' 1.410" N	15.37	92795.99	33°43'30"(L)	1511.558
1265	TP1251	657326.116	2993021.222	88° 35' 10.665" E	27° 3' 1.865" N	20.53	92811.36	26°11'6"(L)	1512.554
1266	TP1252	657310.143	2993034.115	88° 35' 10.091" E	27° 3' 2.291" N	40.03	92831.89	13°29'44"(L)	1513.031
1267	TP1253	657273.985	2993051.294	88° 35' 8.787" E	27° 3' 2.864" N	51.76	92871.92	9°19'11"(R)	1512.943
1268	TP1254	657231.447	2993080.784	88° 35' 7.257" E	27° 3' 3.839" N	17.47	92923.68	43°36'8"(R)	1513.214
1269	TP1255	657227.914	2993097.895	88° 35' 7.136" E	27° 3' 4.397" N	58.06	92941.15	36°51'5"(R)	1513.954
1270	TP1256	657252.621	2993150.431	88° 35' 8.057" E	27° 3' 6.093" N	19.07	92999.21	26°25'52"(R)	1518.643
1271	TP1257	657267.572	2993162.274	88° 35' 8.605" E	27° 3' 6.472" N	8.44	93018.28	46°39'39"(L)	1520.440
1272	TP1258	657268.301	2993170.683	88° 35' 8.635" E	27° 3' 6.745" N	17.74	93026.72	34°14'28"(L)	1520.979
1273	TP1259	657259.624	2993186.155	88° 35' 8.327" E	27° 3' 7.251" N	83.82	93044.46	11°21'36"(R)	1522.742
1274	TP1260	657233.826	2993265.910	88° 35' 7.428" E	27° 3' 9.853" N	60.14	93128.28	3°49'13"(L)	1528.319
1275	TP1261	657211.548	2993321.766	88° 35' 6.645" E	27° 3' 11.677" N	65.95	93188.42	8°25'30"(R)	1533.625
1276	TP1262	657196.354	2993385.943	88° 35' 6.123" E	27° 3' 13.768" N	4.76	93254.37	52°57'20"(L)	1541.897
1277	TP1263	657191.996	2993387.858	88° 35' 5.965" E	27° 3' 13.832" N	3.84	93259.13	67°57'24"(L)	1543.012
1278	TP1264	657189.242	2993385.177	88° 35' 5.864" E	27° 3' 13.746" N	5.32	93262.98	46°48'39"(L)	1544.002
1279	TP1265	657189.338	2993379.862	88° 35' 5.865" E	27° 3' 13.574" N	73.70	93268.29	14°12'38"(L)	1543.756
1280	TP1266	657208.727	2993308.761	88° 35' 6.537" E	27° 3' 11.256" N	46.46	93341.99	8°20'35"(L)	1541.707
1281	TP1267	657227.326	2993266.184	88° 35' 7.192" E	27° 3' 9.865" N	18.08	93388.45	17°59'42"(R)	1540.760
1282	TP1268	657229.090	2993248.194	88° 35' 7.248" E	27° 3' 9.279" N	46.55	93406.53	21°14'47"(R)	1540.215
1283	TP1269	657216.537	2993203.372	88° 35' 6.772" E	27° 3' 7.828" N	15.94	93453.07	48°15'32"(R)	1541.609
1284	TP1270	657202.221	2993196.359	88° 35' 6.249" E	27° 3' 7.606" N	35.63	93469.01	27°37'7"(R)	1542.216
1285	TP1271	657166.599	2993197.306	88° 35' 4.957" E	27° 3' 7.652" N	49.68	93504.65	13°2'56"(R)	1544.653
1286	TP1272	657118.521	2993209.803	88° 35' 3.218" E	27° 3' 8.077" N	18.16	93554.32	22°17'14"(L)	1547.715
1287	TP1273	657100.530	2993207.366	88° 35' 2.564" E	27° 3' 8.005" N	15.32	93572.48	10°4'12"(L)	1549.133
1288	TP1274	657085.944	2993202.687	88° 35' 2.033" E	27° 3' 7.859" N	10.42	93587.80	65°55'52"(R)	1550.986
1289	TP1275	657078.992	2993210.448	88° 35' 1.784" E	27° 3' 8.114" N	14.60	93598.22	73°54'0"(R)	1551.953
1290	TP1276	657086.736	2993222.820	88° 35' 2.070" E	27° 3' 8.513" N	29.23	93612.81	35°6'46"(R)	1552.801
1291	TP1277	657113.675	2993234.167	88° 35' 3.053" E	27° 3' 8.871" N	29.71	93642.04	36°38'57"(R)	1555.164
1292	TP1278	657142.522	2993227.077	88° 35' 4.097" E	27° 3' 8.629" N	11.69	93671.75	41°54'20"(L)	1556.890
1293	TP1279	657152.834	2993232.583	88° 35' 4.473" E	27° 3' 8.803" N	40.65	93683.44	23°9'42"(L)	1557.810
1294	TP1280	657178.270	2993264.286	88° 35' 5.411" E	27° 3' 9.823" N	4.12	93724.09	66°42'40"(L)	1563.242
1295	TP1281	657176.336	2993267.929	88° 35' 5.342" E	27° 3' 9.942" N	6.52	93728.21	79°33'47"(L)	1564.099
1296	TP1282	657170.120	2993265.965	88° 35' 5.116" E	27° 3' 9.881" N	15.52	93734.73	28°45'24"(L)	1564.984
1297	TP1283	657159.398	2993254.748	88° 35' 4.722" E	27° 3' 9.521" N	20.48	93750.25	13°35'8"(R)	1566.735
1298	TP1284	657142.163	2993243.681	88° 35' 4.091" E	27° 3' 9.168" N	29.90	93770.73	60°58'42"(R)	1569.154
1299	TP1285	657115.831	2993257.844	88° 35' 3.142" E	27° 3' 9.639" N	75.97	93800.63	34°23'38"(L)	1570.694
1300	TP1286	657040.298	2993249.743	88° 35' 0.398" E	27° 3' 9.407" N	80.41	93876.59	26°27'52"(R)	1576.079
1301	TP1287	656964.901	2993277.698	88° 34' 57.674" E	27° 3' 10.346" N	39.16	93957.01	7°0'19"(R)	1582.634
1302	TP1288	656930.118	2993295.689	88° 34' 56.420" E	27° 3' 10.945" N	69.59	93996.17	1°18'57"(R)	1585.110
1303	TP1289	656869.053	2993329.071	88° 34' 54.220" E	27° 3' 12.054" N	20.08	94065.76	64°42'59"(R)	1586.656
1304	TP1290	656870.237	2993349.114	88° 34' 54.272" E	27° 3' 12.705" N	15.70	94085.84	89°1'43"(R)	1588.590
1305	TP1291	656885.924	2993348.454	88° 34' 54.841" E	27° 3' 12.677" N	12.15	94101.54	21°57'23"(R)	1590.552
1306	TP1292	656896.995	2993343.440	88° 34' 55.240" E	27° 3' 12.510" N	27.41	94113.69	5°35'20"(R)	1592.473
1307	TP1293	656920.747	2993329.752	88° 34' 56.096" E	27° 3' 12.055" N	4.42	94141.11	29°58'2"(L)	1595.848
1308	TP1294	656925.167	2993329.753	88° 34' 56.256" E	27° 3' 12.053" N	89.33	94145.53	8°47'13"(L)	1597.126
1309	TP1295	657013.446	2993343.419	88° 34' 59.466" E	27° 3' 12.461" N	50.93	94234.86	24°5'28"(L)	1602.780
1310	TP1296	657056.215	2993371.078	88° 35' 1.031" E	27° 3' 13.343" N	26.22	94285.79	54°15'47"(R)	1603.658
1311	TP1297	657080.634	2993361.522	88° 35' 1.912" E	27° 3' 13.022" N	16.40	94312.01	27°53'4"(L)	1605.190
1312	TP1298	657096.928	2993363.382	88° 35' 2.504" E	27° 3' 13.076" N	14.48	94328.41	70°28'42"(L)	1607.407
1313	TP1299	657100.188	2993377.492	88° 35' 2.629" E	27° 3' 13.533" N	106.35	94342.89	48°57'30"(L)	1607.920
1314	TP1300	657037.754	2993463.586	88° 35' 0.403" E	27° 3' 16.356" N	23.86	94449.24	10°26'26"(R)	1614.508
1315	TP1301	657027.478	2993485.122	88° 35' 0.040" E	27° 3' 17.060" N	36.06	94473.10	24°38'38"(R)	1615.801
1316	TP1302	657026.934	2993521.176	88° 35' 0.037" E	27° 3' 18.231" N	21.76	94509.16	24°13'12"(R)	1617.684
1317	TP1303	657035.560	2993541.152	88° 35' 0.359" E	27° 3' 18.877" N	73.91	94530.92	23°32'38"(L)	1619.611
1318	TP1304	657035.317	2993615.066	88° 35' 0.384" E	27° 3' 21.278" N	19.21	94604.84	33°6'5"(L)	1626.805
1319	TP1305	657024.775	2993631.121	88° 35' 0.008" E	27° 3' 21.804" N	12.51	94624.04	15°25'53"(R)	1628.403
1320	TP1306	657020.940	2993643.024	88° 34' 59.875" E	27° 3' 22.193" N	4.60	94636.55	15°55'39(R)"	1629.051

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
1321	TP1307	657020.785	2993647.622	88° 34' 59.871" E	27° 3' 22.342" N	20.76	94641.15	19°58'41"(R)	1629.124
1322	TP1308	657027.215	2993667.356	88° 35' 0.113" E	27° 3' 22.981" N	17.93	94661.90	25°27'41"(R)	1629.669
1323	TP1309	657039.561	2993680.362	88° 35' 0.567" E	27° 3' 23.398" N	20.30	94679.84	4°46'7"(R)	1631.073
1324	TP1310	657054.710	2993693.870	88° 35' 1.123" E	27° 3' 23.831" N	18.16	94700.13	7°30'2"(R)	1630.369
1325	TP1311	657069.727	2993704.084	88° 35' 1.673" E	27° 3' 24.157" N	19.80	94718.30	16°1'37"(L)	1629.856
1326	TP1312	657082.390	2993719.309	88° 35' 2.139" E	27° 3' 24.646" N	21.68	94738.10	15°23'9"(R)	1629.876
1327	TP1313	657100.178	2993731.701	88° 35' 2.791" E	27° 3' 25.041" N	16.39	94759.78	5°34'51"(R)	1630.817
1328	TP1314	657114.471	2993739.716	88° 35' 3.313" E	27° 3' 25.296" N	19.80	94776.16	25°49'32"(L)	1632.642
1329	TP1315	657125.799	2993755.959	88° 35' 3.731" E	27° 3' 25.819" N	49.48	94795.97	8°19'32"(L)	1633.216
1330	TP1316	657147.928	2993800.214	88° 35' 4.555" E	27° 3' 27.248" N	25.71	94845.45	27°0'54"(R)	1634.703
1331	TP1317	657168.615	2993815.476	88° 35' 5.312" E	27° 3' 27.735" N	61.26	94871.15	3°55'8"(R)	1635.407
1332	TP1318	657220.279	2993848.389	88° 35' 7.202" E	27° 3' 28.783" N	44.09	94932.41	3°47'35"(L)	1636.797
1333	TP1319	657255.814	2993874.485	88° 35' 8.504" E	27° 3' 29.617" N	41.06	94976.50	15°22'25"(R)	1637.162
1334	TP1320	657294.172	2993889.147	88° 35' 9.902" E	27° 3' 30.077" N	73.67	95017.56	1°58'27"(R)	1637.684
1335	TP1321	657363.850	2993913.064	88° 35' 12.442" E	27° 3' 30.826" N	41.46	95091.23	3°43'13"(L)	1637.335
1336	TP1322	657402.105	2993929.039	88° 35' 13.837" E	27° 3' 31.329" N	38.60	95132.69	6°32'37"(R)	1635.659
1337	TP1323	657439.183	2993939.756	88° 35' 15.188" E	27° 3' 31.662" N	47.81	95171.28	2°0'14"(L)	1633.851
1338	TP1324	657484.622	2993954.630	88° 35' 16.844" E	27° 3' 32.127" N	37.11	95219.10	17°33'4"(L)	1633.427
1339	TP1325	657514.751	2993976.287	88° 35' 17.947" E	27° 3' 32.818" N	6.89	95256.20	82°23'53"(R)	1636.819
1340	TP1326	657517.996	2993970.204	88° 35' 18.062" E	27° 3' 32.619" N	75.18	95263.09	69°57'24"(L)	1639.339
1341	TP1327	657591.437	2993986.287	88° 35' 20.734" E	27° 3' 33.112" N	35.11	95338.28	44°30'46"(L)	1642.205
1342	TP1328	657610.631	2994015.691	88° 35' 21.444" E	27° 3' 34.059" N	14.73	95373.39	53°8'25"(L)	1646.055
1343	TP1329	657605.593	2994029.529	88° 35' 21.268" E	27° 3' 34.511" N	33.02	95388.12	35°14'1"(L)	1646.585
1344	TP1330	657578.467	2994048.355	88° 35' 20.292" E	27° 3' 35.134" N	37.07	95421.14	30°1'36"(L)	1648.972
1345	TP1331	657541.522	2994051.415	88° 35' 18.953" E	27° 3' 35.248" N	36.83	95458.21	25°28'43"(L)	1651.326
1346	TP1332	657507.082	2994038.371	88° 35' 17.697" E	27° 3' 34.839" N	75.17	95495.03	2°34'24"(L)	1653.503
1347	TP1333	657438.051	2994008.617	88° 35' 15.178" E	27° 3' 33.900" N	114.20	95570.20	2°23'13"(R)	1658.273
1348	TP1334	657331.391	2993967.823	88° 35' 11.289" E	27° 3' 32.618" N	28.66	95684.40	30°38'34"(R)	1665.284
1349	TP1335	657303.142	2993972.658	88° 35' 10.266" E	27° 3' 32.787" N	34.72	95713.06	14°8'42"(L)	1668.021
1350	TP1336	657268.530	2993969.975	88° 35' 9.009" E	27° 3' 32.714" N	38.34	95747.78	15°26'39"(L)	1669.977
1351	TP1337	657232.478	2993956.941	88° 35' 7.695" E	27° 3' 32.305" N	44.47	95786.11	15°5'57"(L)	1672.099
1352	TP1338	657196.043	2993931.452	88° 35' 6.361" E	27° 3' 31.492" N	35.19	95830.58	4°29'43"(R)	1674.710
1353	TP1339	657165.716	2993913.602	88° 35' 5.252" E	27° 3' 30.925" N	20.27	95865.77	82°15'10"(R)	1677.319
1354	TP1340	657153.175	2993929.523	88° 35' 4.804" E	27° 3' 31.447" N	145.36	95886.03	89°20'20"(R)	1679.562
1355	TP1341	657266.317	2994020.780	88° 35' 8.952" E	27° 3' 34.366" N	33.62	96031.39	7°7'53"(L)	1688.968
1356	TP1342	657294.907	2994038.477	88° 35' 9.997" E	27° 3' 34.929" N	69.49	96065.02	7°3'27"(L)	1691.082
1357	TP1343	657349.049	2994082.031	88° 35' 11.982" E	27° 3' 36.322" N	31.70	96134.50	8°57'11"(L)	1695.488
1358	TP1344	657370.358	2994105.505	88° 35' 12.766" E	27° 3' 37.076" N	30.93	96166.21	6°9'21"(R)	1697.515
1359	TP1345	657393.482	2994126.044	88° 35' 13.615" E	27° 3' 37.734" N	20.20	96197.13	7°21'56"(R)	1699.280
1360	TP1346	657410.182	2994137.413	88° 35' 14.226" E	27° 3' 38.096" N	63.45	96217.34	17°51'35"(R)	1700.588
1361	TP1347	657471.054	2994155.313	88° 35' 16.443" E	27° 3' 38.653" N	30.77	96280.79	24°49'56"(L)	1705.405
1362	TP1348	657494.201	2994175.590	88° 35' 17.292" E	27° 3' 39.302" N	31.20	96311.56	8°25'29"(R)	1706.995
1363	TP1349	657520.426	2994192.487	88° 35' 18.252" E	27° 3' 39.840" N	32.53	96342.76	2°28'21"(R)	1709.406
1364	TP1350	657548.503	2994208.908	88° 35' 19.278" E	27° 3' 40.362" N	46.99	96375.28	0°5'53"(R)	1711.982
1365	TP1351	657589.108	2994232.563	88° 35' 20.763" E	27° 3' 41.114" N	33.04	96422.27	8°51'52"(R)	1714.656
1366	TP1352	657619.880	2994244.597	88° 35' 21.885" E	27° 3' 41.493" N	67.24	96455.32	11°37'45"(L)	1717.251
1367	TP1353	657676.280	2994281.207	88° 35' 23.949" E	27° 3' 42.659" N	34.41	96522.56	11°23'37"(R)	1722.114
1368	TP1354	657708.272	2994293.870	88° 35' 25.115" E	27° 3' 43.057" N	38.79	96556.96	3°42'45"(R)	1723.901
1369	TP1355	657745.189	2994305.781	88° 35' 26.461" E	27° 3' 43.429" N	66.07	96595.75	13°53'11"(R)	1726.984
1370	TP1356	657811.095	2994310.384	88° 35' 28.854" E	27° 3' 43.552" N	35.87	96661.82	33°48'52"(L)	1731.391
1371	TP1357	657839.433	2994332.373	88° 35' 29.893" E	27° 3' 44.254" N	54.71	96697.69	35°2'54"(L)	1733.476
1372	TP1358	657855.558	2994384.654	88° 35' 30.502" E	27° 3' 45.946" N	97.63	96752.40	33°16'51"(R)	1736.733
1373	TP1359	657930.806	2994446.855	88° 35' 33.261" E	27° 3' 47.936" N	76.53	96850.03	0°11'10"(L)	1742.478
1374	TP1360	657989.632	2994495.804	88° 35' 35.419" E	27° 3' 49.503" N	92.57	96926.56	2°37'20"(L)	1746.316
1375	TP1361	658058.008	2994558.209	88° 35' 37.929" E	27° 3' 51.502" N	29.39	97019.13	37°20'13"(L)	1751.356
1376	TP1362	658063.252	2994587.130	88° 35' 38.133" E	27° 3' 52.439" N	37.23	97048.52	11°36'6"(R)	1753.193
1377	TP1363	658077.127	2994621.682	88° 35' 38.652" E	27° 3' 53.556" N	69.25	97085.75	26°10'17"(R)	1755.429
1378	TP1364	658128.629	2994667.973	88° 35' 40.542" E	27° 3' 55.039" N	61.26	97155.00	23°49'3"(L)	1759.200
1379	TP1365	658153.774	2994723.838	88° 35' 41.481" E	27° 3' 56.844" N	207.23	97216.27	27°40'12"(R)	1763.908
1380	TP1366	658316.856	2994851.698	88° 35' 47.458" E	27° 4' 0.931" N	62.23	97423.50	35°8'25"(L)	1777.194
1381	TP1367	658334.804	2994911.286	88° 35' 48.137" E	27° 4' 2.859" N	72.45	97485.73	5°58'10"(R)	1782.978
1382	TP1368	658362.800	2994978.108	88° 35' 49.184" E	27° 4' 5.019" N	88.63	97558.18	6°22'10"(L)	1787.641
1383	TP1369	658387.768	2995063.146	88° 35' 50.129" E	27° 4' 7.772" N	124.87	97646.81	37°52'0"(R)	1795.171
1384	TP1370	658489.079	2995136.136	88° 35' 53.839" E	27° 4' 10.101" N	24.33	97771.67	5°2'26"(L)	1807.416
1385	TP1371	658507.491	2995152.035	88° 35' 54.515" E	27° 4' 10.610" N	9.43	97796.00	87°54'52"(L)	1808.713
1386	TP1372	658501.074	2995158.941	88° 35' 54.285" E	27° 4' 10.837" N	32.99	97805.42	48°55'56"(L)	1810.931

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
1387	TP1373	658472.041	2995143.274	88° 35' 53.224" E	27° 4' 10.340" N	32.14	97838.41	9°36'17"(R)	1812.698
1388	TP1374	658441.609	2995132.945	88° 35' 52.115" E	27° 4' 10.017" N	12.18	97870.55	85°58'25"(R)	1815.519
1389	TP1375	658436.893	2995144.178	88° 35' 51.949" E	27° 4' 10.384" N	59.90	97882.73	80°4'18"(L)	1815.643
1390	TP1376	658378.491	2995130.860	88° 35' 49.823" E	27° 4' 9.975" N	6.47	97942.64	84°3925"(R)	1823.121
1391	TP1377	658376.473	2995137.003	88° 35' 49.753" E	27° 4' 10.176" N	7.85	97949.10	17°35'6"(L)	1824.842
1392	TP1378	658372.966	2995144.024	88° 35' 49.629" E	27° 4' 10.405" N	29.68	97956.95	79°15'52"(R)	1825.283
1393	TP1379	658396.583	2995162.003	88° 35' 50.494" E	27° 4' 10.980" N	65.31	97986.63	11°34'39"(R)	1826.654
1394	TP1380	658455.433	2995190.330	88° 35' 52.643" E	27° 4' 11.876" N	75.11	98051.94	11°44'59"(L)	1830.475
1395	TP1381	658515.061	2995236.007	88° 35' 54.828" E	27° 4' 13.335" N	43.09	98127.06	21°2'38"(L)	1835.778
1396	TP1382	658537.579	2995272.749	88° 35' 55.663" E	27° 4' 14.520" N	31.07	98170.15	21°18'47"(L)	1586.656
1397	TP1383	658562.331	2995291.526	88° 35' 56.570" E	27° 4' 15.120" N	34.36	98201.22	11°25'58"(R)	1586.656
1398	TP1384	658593.278	2995306.454	88° 35' 57.700" E	27° 4' 15.592" N	8.32	98235.58	48°40'7"(L)	1586.656
1399	TP1385	658591.116	2995314.484	88° 35' 57.625" E	27° 4' 15.854" N	23.11	98243.89	89°58'51"(L)	1586.656
1400	TP1386	658568.009	2995314.576	88° 35' 56.786" E	27° 4' 15.866" N	0.93	98267.00	85°28'34"(R)	1848.030
1401	TP1387	658567.253	2995314.033	88° 35' 56.759" E	27° 4' 15.849" N	28.07	98267.93	86°13'23"(L)	1851.047
1402	TP1388	658545.071	2995296.833	88° 35' 55.946" E	27° 4' 15.299" N	30.81	98296.00	19°56'46"(R)	1853.564
1403	TP1389	658515.742	2995287.391	88° 35' 54.877" E	27° 4' 15.004" N	31.00	98326.81	21°56'58"(L)	1856.003
1404	TP1390	658491.920	2995267.547	88° 35' 54.003" E	27° 4' 14.370" N	7.00	98357.82	46°19'41"(R)	1858.557
1405	TP1391	658485.222	2995265.510	88° 35' 53.759" E	27° 4' 14.306" N	3.52	98364.82	22°52'45"(R)	1859.365
1406	TP1392	658482.616	2995267.878	88° 35' 53.666" E	27° 4' 14.384" N	8.52	98368.34	80°54'33"(R)	1859.998
1407	TP1393	658487.280	2995275.013	88° 35' 53.838" E	27° 4' 14.614" N	54.38	98376.86	22°4'38"(R)	1861.051
1408	TP1394	658531.955	2995306.009	88° 35' 55.474" E	27° 4' 15.603" N	6.28	98431.24	81°19'33"(L)	1863.880
1409	TP1395	658527.641	2995310.567	88° 35' 55.319" E	27° 4' 15.753" N	33.43	98437.51	82°47'30"(R)	1863.933
1410	TP1396	658543.827	2995339.820	88° 35' 55.920" E	27° 4' 16.696" N	64.18	98470.95	22°57'42"(R)	1866.157
1411	TP1397	658594.348	2995379.408	88° 35' 57.772" E	27° 4' 17.962" N	24.17	98535.13	8°30'5"(R)	1868.541
1412	TP1398	658615.365	2995391.338	88° 35' 58.540" E	27° 4' 18.341" N	19.18	98559.30	20°51'20"(R)	1869.924
1413	TP1399	658634.328	2995394.248	88° 35' 59.230" E	27° 4' 18.427" N	10.54	98578.48	86°12'18"(L)	1872.650
1414	TP1400	658633.422	2995404.749	88° 35' 59.202" E	27° 4' 18.769" N	25.75	98589.02	72°48'18"(L)	1874.201
1415	TP1401	658607.872	2995401.515	88° 35' 58.273" E	27° 4' 18.674" N	62.70	98614.78	11°17'31"(L)	1877.167
1416	TP1402	658548.412	2995381.613	88° 35' 56.106" E	27° 4' 18.052" N	29.59	98677.48	8°19'8"(L)	1882.755
1417	TP1403	658522.008	2995368.261	88° 35' 55.141" E	27° 4' 17.629" N	13.70	98707.07	45°14'52"(R)	1885.416
1418	TP1404	658510.102	2995375.047	88° 35' 54.712" E	27° 4' 17.855" N	26.41	98720.77	88°27'46"(R)	1886.670
1419	TP1405	658522.561	2995398.337	88° 35' 55.175" E	27° 4' 18.606" N	34.40	98747.18	11°22'5"(R)	1888.457
1420	TP1406	658544.450	2995424.878	88° 35' 55.982" E	27° 4' 19.460" N	131.54	98781.59	16°40'28"(R)	1890.373
1421	TP1407	658653.743	2995498.077	88° 35' 59.982" E	27° 4' 21.793" N	14.68	98913.13	5°32'3"(R)	1901.879
1422	TP1408	658666.668	2995505.030	88° 36' 0.455" E	27° 4' 22.013" N	19.76	98927.80	13°16'9"(R)	1902.969
1423	TP1409	658685.757	2995510.148	88° 36' 1.150" E	27° 4' 22.172" N	20.15	98947.57	88°35'20"(L)	1903.701
1424	TP1410	658679.405	2995529.274	88° 36' 0.928" E	27° 4' 22.796" N	49.19	98967.72	87°37'16"(L)	1907.267
1425	TP1411	658632.114	2995515.719	88° 35' 59.206" E	27° 4' 22.375" N	25.06	99016.92	5°11'47"(L)	1910.570
1426	TP1412	658608.750	2995506.661	88° 35' 58.353" E	27° 4' 22.090" N	8.86	99041.97	74°48'26"(R)	1911.873
1427	TP1413	658605.539	2995514.914	88° 35' 58.241" E	27° 4' 22.360" N	40.72	99050.83	87°2'46"(R)	1912.744
1428	TP1414	658643.212	2995530.374	88° 35' 59.615" E	27° 4' 22.846" N	17.49	99091.55	87°21'20"(L)	1916.935
1429	TP1415	658635.832	2995546.233	88° 35' 59.355" E	27° 4' 23.365" N	58.56	99109.04	89°49'54"(R)	1917.209
1430	TP1416	658688.851	2995571.095	88° 36' 1.290" E	27° 4' 24.151" N	88.12	99167.60	1°18'20"(R)	1920.025
1431	TP1417	658769.468	2995606.681	88° 36' 4.233" E	27° 4' 25.273" N	28.37	99255.73	5°6'27"(R)	1925.051
1432	TP1418	658796.343	2995615.783	88° 36' 5.212" E	27° 4' 25.558" N	41.90	99284.10	6°1'28"(R)	1926.693
1433	TP1419	658837.223	2995624.985	88° 36' 6.700" E	27° 4' 25.840" N	75.21	99326.00	7°30'52"(R)	1929.348
1434	TP1420	658912.127	2995631.764	88° 36' 9.422" E	27° 4' 26.029" N	39.47	99401.21	4°22'32"(L)	1933.193
1435	TP1421	658951.055	2995638.311	88° 36' 10.838" E	27° 4' 26.226" N	49.36	99440.69	39°44'45"(L)	1935.685
1436	TP1422	658983.248	2995675.729	88° 36' 12.024" E	27° 4' 27.428" N	49.36	99490.05	5°11'32"(R)	1939.732
1437	TP1423	659018.692	2995710.077	88° 36' 13.326" E	27° 4' 28.530" N	35.80	99539.41	29°2'24"(R)	1942.860
1438	TP1424	659053.258	2995719.378	88° 36' 14.585" E	27° 4' 28.817" N	39.79	99575.20	2°12'13"(R)	1945.224
1439	TP1425	659092.047	2995728.231	88° 36' 15.997" E	27° 4' 29.089" N	98.13	99614.99	24°30'34"(R)	1947.233
1440	TP1426	659188.153	2995708.411	88° 36' 19.476" E	27° 4' 28.405" N	75.87	99713.12	33°53'6"(R)	1952.466
1441	TP1427	659241.298	2995654.259	88° 36' 21.379" E	27° 4' 26.624" N	73.09	99788.99	7°36'27"(L)	1956.626
1442	TP1428	659298.945	2995609.333	88° 36' 23.451" E	27° 4' 25.140" N	29.96	99862.07	3°36'30"(R)	1962.297
1443	TP1429	659321.368	2995589.468	88° 36' 24.256" E	27° 4' 24.486" N	12.35	99892.03	87°43'33"(L)	1965.836
1444	TP1430	659329.916	2995598.378	88° 36' 24.570" E	27° 4' 24.772" N	28.40	99904.38	80°1'40"(L)	1967.806
1445	TP1431	659313.136	2995621.293	88° 36' 23.971" E	27° 4' 25.523" N	124.38	99932.78	2°34'23"(R)	1969.303
1446	TP1432	659244.227	2995724.845	88° 36' 21.518" E	27° 4' 28.916" N	25.03	100057.17	2°34'23"(R)	1979.697
1447	TP1433	659228.056	2995743.956	88° 36' 20.940" E	27° 4' 29.544" N	25.85	100082.20	2°6'57"(L)	1981.744
1448	TP1434	659210.638	2995763.063	88° 36' 20.317" E	27° 4' 30.172" N	38.28	100108.06	13°31'8"(L)	1982.814
1449	TP1435	659178.951	2995784.540	88° 36' 19.177" E	27° 4' 30.882" N	17.67	100146.33	88°5'22"(R)	1986.680
1450	TP1436	659188.373	2995799.490	88° 36' 19.526" E	27° 4' 31.364" N	24.74	100164.01	82°24'39"(R)	1989.783
1451	TP1437	659209.591	2995786.776	88° 36' 20.290" E	27° 4' 30.942" N	33.61	100188.74	9°40'17"(R)	1990.531
1452	TP1438	659235.111	2995764.901	88° 36' 21.206" E	27° 4' 30.221" N	235.30	100222.35	8°25'22"(L)	1991.844

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
1453	TP1439	659434.263	2995639.588	88° 36' 28.376" E	27° 4' 26.067" N	33.72	100457.65	46°9'14"(L)	2009.231
1454	TP1440	659466.989	2995647.732	88° 36' 29.568" E	27° 4' 26.318" N	124.53	100491.38	2°38'50"(R)	2011.531
1455	TP1441	659589.089	2995672.190	88° 36' 34.011" E	27° 4' 27.062" N	38.40	100615.90	1°10'6"(R)	2016.044
1456	TP1442	659626.888	2995678.963	88° 36' 35.386" E	27° 4' 27.266" N	39.07	100654.30	27°37'12"(R)	2015.877
1457	TP1443	659664.153	2995667.241	88° 36' 36.733" E	27° 4' 26.870" N	106.48	100693.37	12°48'38"(R)	2012.189
1458	TP1444	659756.112	2995613.565	88° 36' 40.045" E	27° 4' 25.088" N	69.28	100799.85	1°52'1"(R)	2004.681
1459	TP1445	659814.779	2995576.708	88° 36' 42.157" E	27° 4' 23.866" N	33.30	100869.13	19°5'58"(R)	1999.497
1460	TP1446	659835.627	2995550.743	88° 36' 42.902" E	27° 4' 23.014" N	106.71	100902.43	7°0'40"(R)	1997.315
1461	TP1447	659891.782	2995460.000	88° 36' 44.898" E	27° 4' 20.042" N	100.12	101009.14	16°13'21"(L)	1990.745
1462	TP1448	659966.151	2995392.975	88° 36' 47.566" E	27° 4' 17.834" N	61.90	101109.26	7°45'34"(L)	1993.710
1463	TP1449	660017.308	2995358.121	88° 36' 49.406" E	27° 4' 16.680" N	39.10	101171.16	55°39'6"(L)	1995.340
1464	TP1450	660053.719	2995372.379	88° 36' 50.734" E	27° 4' 17.128" N	34.10	101210.26	34°32'4"(R)	1996.988
1465	TP1451	660086.922	2995364.622	88° 36' 51.936" E	27° 4' 16.862" N	30.33	101244.36	37°42'16"(L)	1998.103
1466	TP1452	660114.507	2995377.225	88° 36' 52.943" E	27° 4' 17.260" N	17.52	101274.69	44°23'10"(L)	1999.638
1467	TP1453	660130.986	2995371.282	88° 36' 53.538" E	27° 4' 17.060" N	54.01	101292.20	14°29'2"(R)	2000.419
1468	TP1454	660175.593	2995340.836	88° 36' 55.143" E	27° 4' 16.052" N	27.39	101346.21	48°55'39"(R)	2003.035
1469	TP1455	660178.816	2995313.633	88° 36' 55.247" E	27° 4' 15.167" N	12.40	101373.60	51°57'6"(L)	2003.439
1470	TP1456	660189.410	2995307.194	88° 36' 55.629" E	27° 4' 14.954" N	32.08	101386.00	31°28'1"(L)	2004.452
1471	TP1457	660221.489	2995307.292	88° 36' 56.793" E	27° 4' 14.943" N	37.65	101418.08	33°38'57"(R)	2005.125
1472	TP1458	660252.895	2995286.526	88° 36' 57.923" E	27° 4' 14.256" N	30.57	101455.73	24°17'6"(R)	2004.460
1473	TP1459	660269.203	2995260.672	88° 36' 58.503" E	27° 4' 13.409" N	30.54	101486.30	14°42'43"(R)	2002.971
1474	TP1460	660278.403	2995231.546	88° 36' 58.823" E	27° 4' 12.459" N	79.22	101516.84	33°23'37"(L)	2002.470
1475	TP1461	660339.899	2995181.611	88° 37' 1.032" E	27° 4' 10.811" N	24.56	101596.06	32°56'37"(L)	2008.457
1476	TP1462	660364.319	2995178.987	88° 37' 1.917" E	27° 4' 10.715" N	22.46	101620.62	22°16'17"(R)	2009.758
1477	TP1463	660384.075	2995168.303	88° 37' 2.629" E	27° 4' 10.360" N	35.07	101643.08	32°30'26"(R)	2012.542
1478	TP1464	660401.127	2995137.652	88° 37' 3.233" E	27° 4' 9.357" N	87.27	101678.16	32°53'10"(L)	2014.933
1479	TP1465	660478.160	2995096.649	88° 37' 6.010" E	27° 4' 7.993" N	40.41	101765.42	20°14'12"(R)	2022.304
1480	TP1466	660505.063	2995066.494	88° 37' 6.972" E	27° 4' 7.002" N	47.79	101805.83	51°42'22"(L)	2023.878
1481	TP1467	660552.769	2995069.365	88° 37' 8.705" E	27° 4' 7.075" N	31.07	101853.63	28°0'52"(R)	2025.733
1482	TP1468	660581.025	2995056.446	88° 37' 9.725" E	27° 4' 6.643" N	79.82	101884.69	27°54'30"(R)	2028.939
1483	TP1469	660629.640	2994993.138	88° 37' 11.459" E	27° 4' 4.566" N	96.62	101964.52	8°5'39"(R)	2031.018
1484	TP1470	660677.111	2994908.983	88° 37' 13.143" E	27° 4' 1.812" N	34.66	102061.14	9°52'32"(R)	2035.954
1485	TP1471	660688.710	2994876.322	88° 37' 13.548" E	27° 4' 0.746" N	4.25	102095.79	53°14'7"(L)	2039.170
1486	TP1472	660692.768	2994875.065	88° 37' 13.695" E	27° 4' 0.704" N	16.67	102100.04	25°3'22"(L)	2039.381
1487	TP1473	660709.283	2994877.340	88° 37' 14.296" E	27° 4' 0.771" N	13.66	102116.71	14°21'18"(L)	2039.891
1488	TP1474	660721.930	2994882.500	88° 37' 14.757" E	27° 4' 0.933" N	13.37	102130.37	7°53'18"(L)	2040.136
1489	TP1475	660733.500	2994889.203	88° 37' 15.180" E	27° 4' 1.146" N	6.46	102143.75	33°15'40"(L)	2040.257
1490	TP1476	660736.399	2994894.979	88° 37' 15.288" E	27° 4' 1.332" N	10.08	102150.21	17°58'50"(L)	2040.101
1491	TP1477	660737.919	2994904.941	88° 37' 15.348" E	27° 4' 1.655" N	17.48	102160.29	9°23'11"(L)	2039.927
1492	TP1478	660737.701	2994922.419	88° 37' 15.348" E	27° 4' 2.223" N	22.22	102177.76	35°30'48"(R)	2039.457
1493	TP1479	660750.383	2994940.666	88° 37' 15.817" E	27° 4' 2.811" N	22.99	102199.99	41°17'49"(R)	2038.533
1494	TP1480	660772.704	2994946.192	88° 37' 16.629" E	27° 4' 2.981" N	10.88	102222.98	47°42'28"(L)	2037.565
1495	TP1481	660777.879	2994955.767	88° 37' 16.822" E	27° 4' 3.290" N	6.77	102233.86	44°8'23"(L)	2037.163
1496	TP1482	660776.040	2994962.285	88° 37' 16.758" E	27° 4' 3.503" N	17.84	102240.64	20°24'52"(L)	2036.723
1497	TP1483	660765.515	2994976.685	88° 37' 16.383" E	27° 4' 3.975" N	22.70	102258.47	42°0'56"(R)	2035.225
1498	TP1484	660767.828	2994999.262	88° 37' 16.477" E	27° 4' 4.707" N	20.12	102281.17	23°22'3"(R)	2035.838
1499	TP1485	660777.650	2995016.825	88° 37' 16.842" E	27° 4' 5.274" N	14.27	102301.29	79°25'4"(R)	2036.184
1500	TP1486	660791.173	2995012.264	88° 37' 17.331" E	27° 4' 5.120" N	11.01	102315.56	4°21'7"(L)	2036.106
1501	TP1487	660801.840	2995009.549	88° 37' 17.716" E	27° 4' 5.027" N	8.29	102326.57	25°27'26"(L)	2035.698
1502	TP1488	660809.327	2995013.104	88° 37' 17.990" E	27° 4' 5.140" N	17.82	102334.86	87°52'20"(L)	2034.767
1503	TP1489	660802.285	2995029.473	88° 37' 17.742" E	27° 4' 5.675" N	24.28	102352.68	60°35'23"(R)	2034.528
1504	TP1490	660817.006	2995048.787	88° 37' 18.285" E	27° 4' 6.296" N	37.63	102376.96	66°32'24"(R)	2033.727
1505	TP1491	660853.543	2995039.776	88° 37' 19.607" E	27° 4' 5.988" N	15.11	102414.59	30°0'31"(L)	2031.815
1506	TP1492	660868.054	2995043.979	88° 37' 20.136" E	27° 4' 6.118" N	17.81	102429.70	43°12'54"(L)	2030.886
1507	TP1493	660877.130	2995059.307	88° 37' 20.472" E	27° 4' 6.612" N	9.31	102447.51	22°0'45"(R)	2030.295
1508	TP1494	660884.533	2995064.958	88° 37' 20.743" E	27° 4' 6.793" N	21.35	102456.83	33°40'35"(R)	2030.058
1509	TP1495	660905.840	2995066.328	88° 37' 21.517" E	27° 4' 6.829" N	16.07	102478.18	11°15'40"(R)	2029.264
1510	TP1496	660921.767	2995064.208	88° 37' 22.094" E	27° 4' 6.753" N	41.56	102494.25	1°42'31"(R)	2028.740
1511	TP1497	660962.780	2995057.500	88° 37' 23.580" E	27° 4' 6.518" N	11.21	102535.80	68°4'22"(L)	2025.817
1512	TP1498	660968.589	2995067.085	88° 37' 23.795" E	27° 4' 6.827" N	25.62	102547.01	67°29'21"(L)	2024.023
1513	TP1499	660953.433	2995087.738	88° 37' 23.255" E	27° 4' 7.504" N	9.62	102572.63	1°51'54"(L)	2020.087
1514	TP1500	660947.494	2995095.302	88° 37' 23.043" E	27° 4' 7.752" N	22.41	102582.25	22°34'39"(R)	2019.196
1515	TP1501	660941.482	2995116.895	88° 37' 22.835" E	27° 4' 8.457" N	42.43	102604.66	58°23'45"(L)	2016.607
1516	TP1502	660900.707	2995128.621	88° 37' 21.360" E	27° 4' 8.855" N	23.92	102647.09	17°45'21"(L)	2013.198
1517	TP1503	660876.798	2995127.907	88° 37' 20.492" E	27° 4' 8.841" N	25.63	102671.01	25°48'22"(R)	2011.854
1518	TP1504	660853.402	2995138.370	88° 37' 19.648" E	27° 4' 9.191" N	20.95	102696.64	36°25'31"(R)	2010.156

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
1519	TP1505	660843.090	2995156.610	88° 37' 19.282" E	27° 4' 9.788" N	36.68	102717.59	21°54'57"(R)	2008.046
1520	TP1506	660838.262	2995192.970	88° 37' 19.124" E	27° 4' 10.971" N	72.54	102754.27	1°45'14"(R)	2004.492
1521	TP1507	660830.919	2995265.134	88° 37' 18.891" E	27° 4' 13.319" N	53.37	102826.81	7°4'0"(R)	1998.296
1522	TP1508	660832.089	2995318.493	88° 37' 18.959" E	27° 4' 15.052" N	29.31	102880.18	20°39'29"(L)	1994.681
1523	TP1509	660822.354	2995346.136	88° 37' 18.618" E	27° 4' 15.954" N	57.85	102909.48	18°10'34"(R)	1991.811
1524	TP1510	660821.117	2995403.969	88° 37' 18.600" E	27° 4' 17.834" N	44.29	102967.33	23°37'53"(R)	1987.742
1525	TP1511	660837.997	2995444.912	88° 37' 19.232" E	27° 4' 19.157" N	24.52	103011.62	8°47'58"(R)	1984.962
1526	TP1512	660850.700	2995465.882	88° 37' 19.703" E	27° 4' 19.833" N	53.51	103036.13	4°18'2"(L)	1983.423
1527	TP1513	660874.913	2995513.599	88° 37' 20.604" E	27° 4' 21.373" N	31.17	103089.64	18°35'28"(L)	1981.603
1528	TP1514	660879.419	2995544.440	88° 37' 20.782" E	27° 4' 22.373" N	20.66	103120.81	7°55'29"(R)	1980.551
1529	TP1515	660885.196	2995564.274	88° 37' 21.001" E	27° 4' 23.015" N	89.53	103141.47	20°32'45"(R)	1980.248
1530	TP1516	660938.808	2995635.979	88° 37' 22.980" E	27° 4' 25.322" N	34.53	103231.00	34°56'5"(L)	1976.659
1531	TP1517	660939.922	2995670.486	88° 37' 23.037" E	27° 4' 26.443" N	97.74	103265.53	11°37'30"(R)	1974.389
1532	TP1518	660962.697	2995765.538	88° 37' 23.908" E	27° 4' 29.522" N	60.47	103363.27	33°0'42"(R)	1968.967
1533	TP1519	661006.549	2995807.172	88° 37' 25.519" E	27° 4' 30.856" N	82.47	103423.74	22°54'32"(L)	1966.473
1534	TP1520	661039.537	2995882.761	88° 37' 26.752" E	27° 4' 33.298" N	37.03	103506.21	62°59'12"(R)	1962.383
1535	TP1521	661076.496	2995884.980	88° 37' 28.094" E	27° 4' 33.355" N	57.17	103543.24	35°25'11"(L)	1960.222
1536	TP1522	661121.016	2995920.846	88° 37' 29.727" E	27° 4' 34.501" N	91.11	103600.41	32°22'7"(R)	1957.100
1537	TP1523	661211.538	2995931.139	88° 37' 33.017" E	27° 4' 34.798" N	28.74	103691.51	74°35'31"(L)	1951.329
1538	TP1524	661215.994	2995959.528	88° 37' 33.192" E	27° 4' 35.718" N	95.23	103720.25	38°53'19"(R)	1948.947
1539	TP1525	661286.553	2996023.485	88° 37' 35.783" E	27° 4' 37.766" N	70.20	103815.48	21°21'21"(R)	1944.551
1540	TP1526	661352.162	2996048.453	88° 37' 38.176" E	27° 4' 38.550" N	102.51	103885.68	22°22'47"(L)	1948.004
1541	TP1527	661426.874	2996118.646	88° 37' 40.921" E	27° 4' 40.799" N	35.05	103988.19	24°21'38"(R)	1953.376
1542	TP1528	661460.042	2996129.972	88° 37' 42.130" E	27° 4' 41.153" N	68.31	104023.24	8°38'38"(L)	1955.067
1543	TP1529	661520.634	2996161.511	88° 37' 44.344" E	27° 4' 42.152" N	89.12	104091.55	24°36'13"(R)	1957.105
1544	TP1530	661609.644	2996166.011	88° 37' 47.577" E	27° 4' 42.261" N	35.34	104180.67	24°3'42"(R)	1961.465
1545	TP1531	661642.599	2996153.250	88° 37' 48.767" E	27° 4' 41.833" N	26.53	104216.01	23°37'27"(L)	1963.259
1546	TP1532	661669.103	2996154.386	88° 37' 49.729" E	27° 4' 41.858" N	75.00	104242.54	44°31'51"(L)	1964.487
1547	TP1533	661720.268	2996209.229	88° 37' 51.612" E	27° 4' 43.619" N	170.25	104317.54	27°59'13"(R)	1967.828
1548	TP1534	661881.245	2996264.659	88° 37' 57.481" E	27° 4' 45.352" N	25.25	104487.80	40°9'13"(L)	1971.452
1549	TP1535	661894.192	2996286.338	88° 37' 57.961" E	27° 4' 46.051" N	24.86	104513.05	14°5'7"(R)	1972.544
1550	TP1536	661911.750	2996303.938	88° 37' 58.607" E	27° 4' 46.615" N	59.97	104537.91	35°12'34"(R)	1973.749
1551	TP1537	661970.833	2996314.206	88° 38' 0.756" E	27° 4' 46.924" N	38.09	104597.88	47°31'3"(L)	1976.454
1552	TP1538	661991.369	2996346.288	88° 38' 1.517" E	27° 4' 47.957" N	79.59	104635.97	52°0'38"(R)	1977.582
1553	TP1539	662070.614	2996353.731	88° 38' 4.396" E	27° 4' 48.166" N	21.07	104715.56	43°10'45"(R)	1979.363
1554	TP1540	662087.261	2996340.812	88° 38' 4.994" E	27° 4' 47.739" N	45.36	104736.63	68°16'15"(L)	1979.471
1555	TP1541	662126.362	2996363.805	88° 38' 6.424" E	27° 4' 48.470" N	34.43	104781.99	29°28'17"(L)	1981.108
1556	TP1542	662143.616	2996393.604	88° 38' 7.065" E	27° 4' 49.430" N	128.06	104816.43	35°31'0"(R)	1982.589
1557	TP1543	662260.230	2996446.532	88° 38' 11.322" E	27° 4' 51.101" N	57.97	104944.49	1°13'13"(L)	1986.721
1558	TP1544	662312.497	2996471.611	88° 38' 13.231" E	27° 4' 51.893" N	52.71	105002.46	6°25'34"(R)	1986.943
1559	TP1545	662362.269	2996488.949	88° 38' 15.046" E	27° 4' 52.436" N	27.99	105055.17	27°39'4"(R)	1988.066
1560	TP1546	662389.952	2996484.839	88° 38' 16.049" E	27° 4' 52.291" N	61.31	105083.16	14°43'46"(R)	1989.452
1561	TP1547	662446.312	2996460.713	88° 38' 18.083" E	27° 4' 51.483" N	46.50	105144.46	56°36'45"(L)	1993.798
1562	TP1548	662485.112	2996486.334	88° 38' 19.503" E	27° 4' 52.299" N	30.73	105190.96	24°49'11"(R)	1996.240
1563	TP1549	662515.495	2996490.939	88° 38' 20.608" E	27° 4' 52.436" N	31.37	105221.69	5°34'6"(R)	1998.752
1564	TP1550	662546.817	2996492.608	88° 38' 21.746" E	27° 4' 52.477" N	101.48	105253.05	34°44'35"(L)	2001.340
1565	TP1551	662627.006	2996554.794	88° 38' 24.686" E	27° 4' 54.463" N	37.09	105354.53	39°53'25"(R)	2009.259
1566	TP1552	662664.069	2996553.437	88° 38' 26.031" E	27° 4' 54.403" N	35.92	105391.62	10°10'3"(R)	2011.902
1567	TP1553	662699.168	2996545.807	88° 38' 27.301" E	27° 4' 54.140" N	42.50	105427.54	44°3'20"(L)	2014.765
1568	TP1554	662735.292	2996568.197	88° 38' 28.623" E	27° 4' 54.853" N	29.02	105470.04	44°54'12"(L)	2017.862
1569	TP1555	662741.970	2996596.435	88° 38' 28.878" E	27° 4' 55.767" N	27.93	105499.05	31°9'49"(R)	2019.884
1570	TP1556	662761.537	2996616.368	88° 38' 29.598" E	27° 4' 56.406" N	27.68	105526.99	16°42'26"(R)	2021.114
1571	TP1557	662785.784	2996629.711	88° 38' 30.485" E	27° 4' 56.830" N	47.88	105554.66	27°59'19"(R)	2023.135
1572	TP1558	662833.661	2996630.409	88° 38' 32.223" E	27° 4' 56.832" N	12.51	105602.54	32°58'41"(L)	2027.571
1573	TP1559	662844.057	2996637.372	88° 38' 32.603" E	27° 4' 57.054" N	23.26	105615.06	34°27'16"(L)	2028.803
1574	TP1560	662852.670	2996658.980	88° 38' 32.926" E	27° 4' 57.752" N	9.06	105638.32	32°4'34"(L)	2030.324
1575	TP1561	662851.043	2996667.894	88° 38' 32.871" E	27° 4' 58.043" N	6.42	105647.38	48°1'51"(R)	2031.526
1576	TP1562	662852.199	2996674.213	88° 38' 32.916" E	27° 4' 58.247" N	17.43	105653.80	87°14'57"(L)	2031.890
1577	TP1563	662835.222	2996678.168	88° 38' 32.302" E	27° 4' 58.383" N	34.49	105671.23	7°45'24"(L)	2032.851
1578	TP1564	662800.882	2996681.389	88° 38' 31.057" E	27° 4' 58.502" N	57.75	105705.72	37°7'29"(L)	2034.673
1579	TP1565	662751.781	2996650.985	88° 38' 29.260" E	27° 4' 57.535" N	32.57	105763.48	20°51'48"(R)	2039.615
1580	TP1566	662719.802	2996644.825	88° 38' 28.097" E	27° 4' 57.349" N	26.08	105796.04	3°10'52"(L)	2041.761
1581	TP1567	662694.504	2996638.478	88° 38' 27.176" E	27° 4' 57.153" N	14.55	105822.13	67°40'11"(R)	2044.334
1582	TP1568	662685.869	2996650.184	88° 38' 26.868" E	27° 4' 57.537" N	38.39	105836.67	85°38'5"(R)	2046.724
1583	TP1569	662714.937	2996675.257	88° 38' 27.935" E	27° 4' 58.339" N	28.37	105875.06	7°7'53"(R)	2049.069
1584	TP1570	662738.553	2996690.976	88° 38' 28.799" E	27° 4' 58.840" N	81.81	105903.43	8°17'58"(R)	2050.132

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S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
1585	TP1571	662812.484	2996726.000	88° 38' 31.499" E	27° 4' 59.947" N	24.71	105985.24	32°35'15"(L)	2057.102
1586	TP1572	662825.603	2996746.943	88° 38' 31.985" E	27° 5' 0.622" N	26.74	106009.95	9°2'19"(R)	2058.972
1587	TP1573	662843.185	2996767.096	88° 38' 32.633" E	27° 5' 1.269" N	29.93	106036.69	28°14'39"(R)	2060.887
1588	TP1574	662871.192	2996777.653	88° 38' 33.655" E	27° 5' 1.600" N	26.84	106066.62	24°12'17"(L)	2062.989
1589	TP1575	662890.218	2996796.585	88° 38' 34.354" E	27° 5' 2.207" N	31.47	106093.46	5°14'53"(R)	2065.005
1590	TP1576	662914.459	2996816.646	88° 38' 35.244" E	27° 5' 2.848" N	32.31	106124.93	6°11'15"(R)	2066.487
1591	TP1577	662941.425	2996834.442	88° 38' 36.231" E	27° 5' 3.415" N	28.90	106157.24	14°10'10"(L)	2068.172
1592	TP1578	662960.912	2996855.777	88° 38' 36.948" E	27° 5' 4.100" N	104.23	106186.13	5°42'29"(L)	2070.330
1593	TP1579	663023.200	2996939.343	88° 38' 39.249" E	27° 5' 6.789" N	99.74	106290.36	25°26'54"(R)	2078.131
1594	TP1580	663111.384	2996985.939	88° 38' 42.472" E	27° 5' 8.265" N	52.69	106390.10	29°21'7"(L)	2084.588
1595	TP1581	663139.926	2997030.234	88° 38' 43.529" E	27° 5' 9.692" N	27.77	106442.79	16°33'49"(R)	2087.932
1596	TP1582	663161.002	2997048.324	88° 38' 44.302" E	27° 5' 10.271" N	23.08	106470.57	10°28'45"(R)	2090.436
1597	TP1583	663180.957	2997059.920	88° 38' 45.032" E	27° 5' 10.639" N	113.70	106493.65	22°49'8"(L)	2092.464
1598	TP1584	663249.414	2997150.700	88° 38' 47.560" E	27° 5' 13.559" N	23.60	106607.35	20°1'24"(R)	2100.918
1599	TP1585	663269.220	2997163.541	88° 38' 48.285" E	27° 5' 13.968" N	53.35	106630.95	4°19'0"(R)	2102.509
1600	TP1586	663316.042	2997189.112	88° 38' 49.997" E	27° 5' 14.779" N	14.34	106684.30	0°27'37"(R)	2105.331
1601	TP1587	663328.686	2997195.886	88° 38' 50.459" E	27° 5' 14.994" N	91.66	106698.64	2°45'11"(R)	2105.796
1602	TP1588	663411.471	2997235.243	88° 38' 53.483" E	27° 5' 16.237" N	24.68	106790.31	37°58'38"(R)	2110.080
1603	TP1589	663435.562	2997229.880	88° 38' 54.354" E	27° 5' 16.053" N	21.61	106814.99	37°10'31"(L)	2111.349
1604	TP1590	663455.208	2997238.885	88° 38' 55.072" E	27° 5' 16.337" N	34.77	106836.60	7°36'33"(R)	2112.970
1605	TP1591	663488.453	2997249.059	88° 38' 56.283" E	27° 5' 16.653" N	67.27	106871.37	23°15'58"(L)	2115.060
1606	TP1592	663539.771	2997292.552	88° 38' 58.167" E	27° 5' 18.044" N	27.73	106938.64	15°0'38"(L)	2118.992
1607	TP1593	663555.558	2997315.345	88° 38' 58.751" E	27° 5' 18.778" N	19.64	106966.36	14°48'8"(R)	2121.155
1608	TP1594	663570.495	2997328.098	88° 38' 59.299" E	27° 5' 19.186" N	29.87	106986.00	28°51'35"(R)	2122.719
1609	TP1595	663599.753	2997334.120	88° 39' 0.364" E	27° 5' 19.369" N	38.26	107015.87	27°41'15"(L)	2124.477
1610	TP1596	663629.355	2997358.365	88° 39' 1.450" E	27° 5' 20.144" N	76.05	107054.14	49°45'21"(R)	2127.082
1611	TP1597	663704.148	2997344.586	88° 39' 4.158" E	27° 5' 19.665" N	99.57	107130.19	21°27'46"(L)	2132.531
1612	TP1598	663801.882	2997363.628	88° 39' 7.715" E	27° 5' 20.242" N	64.65	107229.76	20°52'43"(L)	2139.585
1613	TP1599	663856.764	2997397.794	88° 39' 9.723" E	27° 5' 21.328" N	24.74	107294.41	24°9'44"(R)	2144.219
1614	TP1600	663881.276	2997401.126	88° 39' 10.615" E	27° 5' 21.426" N	44.33	107319.15	80°20'3"(R)	2145.428
1615	TP1601	663894.538	2997358.825	88° 39' 11.076" E	27° 5' 20.046" N	27.54	107363.48	7°59'59"(R)	2148.029
1616	TP1602	663899.039	2997331.660	88° 39' 11.226" E	27° 5' 19.162" N	45.94	107391.01	5°39'59"(L)	2150.760
1617	TP1603	663910.987	2997287.298	88° 39' 11.639" E	27° 5' 17.715" N	53.53	107436.96	15°43'44"(L)	2153.946
1618	TP1604	663938.399	2997241.319	88° 39' 12.612" E	27° 5' 16.210" N	38.67	107490.49	32°6'48"(L)	2157.399
1619	TP1605	663972.826	2997223.714	88° 39' 13.853" E	27° 5' 15.623" N	50.32	107529.15	17°46'1"(R)	2160.770
1620	TP1606	664008.502	2997188.224	88° 39' 15.131" E	27° 5' 14.455" N	19.46	107579.48	88°21'35"(L)	2164.305
1621	TP1607	664021.822	2997202.403	88° 39' 15.621" E	27° 5' 14.910" N	19.48	107598.93	85°28'10"(R)	2171.771
1622	TP1608	664008.513	2997216.629	88° 39' 15.145" E	27° 5' 15.378" N	87.47	107618.41	0°41'21"(L)	2171.636
1623	TP1609	663947.987	2997279.782	88° 39' 12.978" E	27° 5' 17.455" N	24.20	107705.89	19°3'47"(R)	2176.647
1624	TP1610	663937.867	2997301.764	88° 39' 12.621" E	27° 5' 18.174" N	62.56	107730.08	30°49'42"(R)	2177.394
1625	TP1611	663944.523	2997363.964	88° 39' 12.893" E	27° 5' 20.192" N	37.64	107792.64	36°49'54"(L)	2181.337
1626	TP1612	663925.291	2997396.324	88° 39' 12.210" E	27° 5' 21.251" N	39.73	107830.28	35°48'36"(R)	2182.990
1627	TP1613	663928.813	2997435.893	88° 39' 12.357" E	27° 5' 22.535" N	26.70	107870.01	42°6'10"(L)	2186.291
1628	TP1614	663912.741	2997457.209	88° 39' 11.783" E	27° 5' 23.235" N	24.00	107896.71	46°40'40"(L)	2187.592
1629	TP1615	663888.887	2997459.845	88° 39' 10.919" E	27° 5' 23.331" N	86.28	107920.70	17°3'33"(L)	2189.696
1630	TP1616	663804.118	2997443.746	88° 39' 7.834" E	27° 5' 22.844" N	26.03	108006.99	23°42'36"(R)	2193.269
1631	TP1617	663778.753	2997449.582	88° 39' 6.916" E	27° 5' 23.044" N	39.23	108033.02	15°48'58"(R)	2194.497
1632	TP1618	663744.368	2997468.464	88° 39' 5.677" E	27° 5' 23.672" N	115.25	108072.24	12°17'50"(L)	2197.638
1633	TP1619	663633.854	2997501.149	88° 39' 1.681" E	27° 5' 24.781" N	14.01	108187.49	32°8'41"(R)	2202.996
1634	TP1620	663624.592	2997511.662	88° 39' 1.350" E	27° 5' 25.127" N	79.83	108201.50	67°26'2"(R)	2203.456
1635	TP1621	663659.657	2997583.382	88° 39' 2.657" E	27° 5' 27.442" N	29.62	108281.33	18°20'24"(L)	2202.410
1636	TP1622	663663.633	2997612.734	88° 39' 2.815" E	27° 5' 28.394" N	10.46	108310.95	54°24'39"(L)	2201.794
1637	TP1623	663656.020	2997619.909	88° 39' 2.542" E	27° 5' 28.630" N	8.01	108321.42	8°59'29"(R)	2201.455
1638	TP1624	663651.119	2997626.249	88° 39' 2.368" E	27° 5' 28.838" N	34.50	108329.43	40°43'29"(L)	2200.839
1639	TP1625	663617.323	2997633.168	88° 39' 1.144" E	27° 5' 29.078" N	36.13	108363.93	47°31'55"(R)	2197.404
1640	TP1626	663598.772	2997664.167	88° 39' 0.485" E	27° 5' 30.093" N	31.41	108400.05	28°16'52"(R)	2194.999
1641	TP1627	663597.338	2997695.542	88° 39' 0.448" E	27° 5' 31.113" N	18.47	108431.46	35°31'19"(L)	2194.470
1642	TP1628	663585.934	2997710.065	88° 39' 0.041" E	27° 5' 31.589" N	17.44	108449.92	56°12'43"(L)	2193.486
1643	TP1629	663568.544	2997708.742	88° 38' 59.409" E	27° 5' 31.554" N	26.94	108467.37	16°40'35"(L)	2192.635
1644	TP1630	663543.399	2997699.076	88° 38' 58.492" E	27° 5' 31.250" N	59.18	108494.30	89°57'54"(R)	2189.884
1645	TP1631	663522.132	2997754.299	88° 38' 57.746" E	27° 5' 33.054" N	24.58	108553.48	48°42'24"(L)	2188.568
1646	TP1632	663499.071	2997762.798	88° 38' 56.913" E	27° 5' 33.339" N	15.45	108578.06	12°32'5"(L)	2187.109
1647	TP1633	663483.763	2997764.867	88° 38' 56.359" E	27° 5' 33.413" N	49.47	108593.50	54°46'11"(R)	2186.406
1648	TP1634	663460.896	2997808.731	88° 38' 55.549" E	27° 5' 34.848" N	116.24	108642.97	36°17'22"(L)	2185.847
1649	TP1635	663356.582	2997860.007	88° 38' 51.787" E	27° 5' 36.558" N	118.02	108759.21	13°21'41"(L)	2182.022
1650	TP1636	663241.497	2997886.186	88° 38' 47.622" E	27° 5' 37.458" N	24.29	108877.23	21°10'21"(R)	2177.167

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
1651	TP1637	663221.353	2997899.767	88° 38' 46.897" E	27° 5' 37.908" N	58.05	108901.53	80°20'35"(R)	2175.705
1652	TP1638	663245.271	2997952.664	88° 38' 47.791" E	27° 5' 39.616" N	49.96	108959.58	49°18'45"(L)	2175.030
1653	TP1639	663224.173	2997997.947	88° 38' 47.046" E	27° 5' 41.096" N	48.81	109009.54	29°13'44"(R)	2170.927
1654	TP1640	663227.788	2998046.625	88° 38' 47.201" E	27° 5' 42.676" N	17.24	109058.35	58°15'5"(L)	2168.707
1655	TP1641	663213.839	2998056.758	88° 38' 46.699" E	27° 5' 43.011" N	26.36	109075.59	8°35'41"(L)	2169.350
1656	TP1642	663190.437	2998068.889	88° 38' 45.855" E	27° 5' 43.415" N	36.04	109101.95	5°9'10"(L)	2167.910
1657	TP1643	663157.084	2998082.533	88° 38' 44.651" E	27° 5' 43.873" N	109.45	109137.99	58°27'46"(R)	2165.173
1658	TP1644	663139.418	2998190.545	88° 38' 44.061" E	27° 5' 47.390" N	27.15	109247.43	25°21'32"(L)	2160.763
1659	TP1645	663123.982	2998212.881	88° 38' 43.512" E	27° 5' 48.122" N	48.32	109274.58	48°1'35"(L)	2159.946
1660	TP1646	663076.052	2998219.043	88° 38' 41.775" E	27° 5' 48.342" N	25.77	109322.91	22°57'17"(R)	2156.295
1661	TP1647	663053.800	2998232.036	88° 38' 40.973" E	27° 5' 48.774" N	5.03	109348.68	22°8'44"(R)	2154.910
1662	TP1648	663050.733	2998236.022	88° 38' 40.864" E	27° 5' 48.905" N	9.68	109353.70	5°8'57"(R)	2154.755
1663	TP1649	663045.542	2998244.194	88° 38' 40.679" E	27° 5' 49.173" N	52.54	109363.39	4°14'14"(R)	2154.620
1664	TP1650	663020.724	2998290.504	88° 38' 39.800" E	27° 5' 50.688" N	32.57	109415.93	71°0'32"(R)	2152.289
1665	TP1651	663042.865	2998314.396	88° 38' 40.615" E	27° 5' 51.454" N	14.12	109448.50	25°9'35"(L)	2151.089
1666	TP1652	663047.148	2998327.847	88° 38' 40.777" E	27° 5' 51.890" N	16.46	109462.62	53°13'56"(L)	2149.141
1667	TP1653	663037.573	2998341.236	88° 38' 40.436" E	27° 5' 52.329" N	17.87	109479.08	12°0'46"(L)	2149.970
1668	TP1654	663024.380	2998353.290	88° 38' 39.963" E	27° 5' 52.726" N	7.60	109496.95	10°2'49"(L)	2149.105
1669	TP1655	663017.964	2998357.357	88° 38' 39.732" E	27° 5' 52.861" N	33.59	109504.54	25°34'32"(L)	2149.117
1670	TP1656	662984.609	2998361.331	88° 38' 38.523" E	27° 5' 53.004" N	64.92	109538.14	33°44'59"(L)	2146.654
1671	TP1657	662926.744	2998331.904	88° 38' 36.408" E	27° 5' 52.073" N	17.53	109603.05	12°59'21"(L)	2141.707
1672	TP1658	662913.302	2998320.647	88° 38' 35.915" E	27° 5' 51.713" N	40.00	109620.59	11°16'52"(L)	2140.877
1673	TP1659	662888.250	2998289.460	88° 38' 34.991" E	27° 5' 50.710" N	116.82	109660.59	60°3'12"(R)	2139.985
1674	TP1660	662772.812	2998307.388	88° 38' 30.809" E	27° 5' 51.341" N	28.94	109777.41	22°8'4"(L)	2135.199
1675	TP1661	662744.652	2998300.728	88° 38' 29.783" E	27° 5' 51.137" N	42.54	109806.35	11°20'44"(L)	2133.694
1676	TP1662	662705.985	2998282.982	88° 38' 28.371" E	27° 5' 50.577" N	21.32	109848.89	7°23'31"(L)	2131.419
1677	TP1663	662687.911	2998271.669	88° 38' 27.710" E	27° 5' 50.217" N	62.96	109870.22	9°49'15"(L)	2130.537
1678	TP1664	662641.024	2998229.651	88° 38' 25.988" E	27° 5' 48.872" N	40.76	109933.17	51°38'17"(R)	2128.220
1679	TP1665	662600.854	2998236.570	88° 38' 24.533" E	27° 5' 49.114" N	21.22	109973.94	30°17'33"(L)	2127.581
1680	TP1666	662580.981	2998229.132	88° 38' 23.808" E	27° 5' 48.880" N	33.54	109995.16	13°7'2"(L)	2126.977
1681	TP1667	662553.055	2998210.552	88° 38' 22.785" E	27° 5' 48.288" N	54.89	110028.70	23°0'18"(R)	2125.501
1682	TP1668	662499.103	2998200.424	88° 38' 20.822" E	27° 5' 47.982" N	19.72	110083.59	23°7'15"(L)	2123.033
1683	TP1669	662482.705	2998189.466	88° 38' 20.222" E	27° 5' 47.633" N	12.10	110103.31	136°14'13"(L)	2122.721
1684	TP1670	662494.625	2998187.362	88° 38' 20.653" E	27° 5' 47.560" N	9.07	110115.42	68°37'48"(R)	2122.031
1685	TP1671	662497.188	2998178.666	88° 38' 20.742" E	27° 5' 47.276" N	119.33	110124.48	85°2'33"(L)	2120.750
1686	TP1672	662614.134	2998202.384	88° 38' 24.999" E	27° 5' 47.997" N	17.39	110243.81	18°17'53"(R)	2118.050
1687	TP1673	662631.400	2998200.315	88° 38' 25.624" E	27° 5' 47.923" N	16.97	110261.20	38°33'8"(R)	2117.073
1688	TP1674	662643.318	2998188.236	88° 38' 26.051" E	27° 5' 47.525" N	11.94	110278.17	28°55'28"(R)	2116.501
1689	TP1675	662646.548	2998176.736	88° 38' 26.163" E	27° 5' 47.150" N	25.71	110290.11	57°33'32"(R)	2116.723
1690	TP1676	662629.388	2998157.590	88° 38' 25.531" E	27° 5' 46.535" N	46.98	110315.83	51°34'22"(R)	2115.642
1691	TP1677	662582.494	2998160.410	88° 38' 23.830" E	27° 5' 46.647" N	38.59	110362.80	4°40'35"(L)	2114.216
1692	TP1678	662543.916	2998159.579	88° 38' 22.429" E	27° 5' 46.636" N	8.71	110401.39	72°32'0"(R)	2112.755
1693	TP1679	662539.372	2998167.008	88° 38' 22.268" E	27° 5' 46.880" N	50.95	110410.10	81°48'29"(L)	2112.207
1694	TP1680	662492.561	2998146.886	88° 38' 20.559" E	27° 5' 46.246" N	18.64	110461.05	14°58'57"(R)	2109.563
1695	TP1681	662474.112	2998144.202	88° 38' 19.888" E	27° 5' 46.166" N	13.04	110479.69	17°24'26"(R)	2107.734
1696	TP1682	662461.240	2998146.270	88° 38' 19.422" E	27° 5' 46.239" N	48.46	110492.73	38°49'6"(R)	2107.404
1697	TP1683	662428.780	2998182.255	88° 38' 18.261" E	27° 5' 47.422" N	27.71	110541.19	1°32'44"(R)	2104.229
1698	TP1684	662410.781	2998203.324	88° 38' 17.617" E	27° 5' 48.114" N	16.57	110568.90	46°41'31"(R)	2103.614
1699	TP1685	662412.566	2998219.795	88° 38' 17.690" E	27° 5' 48.648" N	50.61	110585.47	43°52'30"(R)	2102.042
1700	TP1686	662451.370	2998252.286	88° 38' 19.114" E	27° 5' 49.687" N	25.13	110636.08	21°36'45"(L)	2098.428
1701	TP1687	662463.340	2998274.380	88° 38' 19.559" E	27° 5' 50.400" N	25.27	110661.21	11°51'59"(R)	2097.302
1702	TP1688	662479.687	2998293.646	88° 38' 20.161" E	27° 5' 51.019" N	17.29	110686.48	30°42'52"(R)	2095.717
1703	TP1689	662496.042	2998299.268	88° 38' 20.758" E	27° 5' 51.195" N	18.38	110703.77	49°58'55"(L)	2095.781
1704	TP1690	662502.643	2998316.422	88° 38' 21.005" E	27° 5' 51.749" N	62.16	110722.15	57°9'53"(L)	2095.058
1705	TP1691	662466.002	2998366.636	88° 38' 19.699" E	27° 5' 53.396" N	47.12	110784.31	50°15'13"(R)	2091.573
1706	TP1692	662477.510	2998412.331	88° 38' 20.138" E	27° 5' 54.876" N	18.76	110831.43	65°16'0"(R)	2089.720
1707	TP1693	662495.949	2998415.781	88° 38' 20.809" E	27° 5' 54.980" N	24.09	110850.19	39°21'50"(R)	2088.314
1708	TP1694	662517.066	2998404.188	88° 38' 21.570" E	27° 5' 54.595" N	20.19	110874.28	37°33'5"(L)	2087.273
1709	TP1695	662537.022	2998407.272	88° 38' 22.296" E	27° 5' 54.687" N	13.61	110894.48	42°34'10"(L)	2086.202
1710	TP1696	662545.524	2998417.905	88° 38' 22.610" E	27° 5' 55.028" N	91.91	110908.09	13°52'34"(L)	2085.533
1711	TP1697	662584.031	2998501.358	88° 38' 24.047" E	27° 5' 57.723" N	16.84	111000.00	12°22'13"(L)	2077.935
1712	TP1698	662587.648	2998517.810	88° 38' 24.186" E	27° 5' 58.256" N	27.37	111016.84	32°31'20"(L)	2077.471
1713	TP1699	662578.233	2998543.506	88° 38' 23.857" E	27° 5' 59.095" N	37.45	111044.21	29°7'23"(R)	2076.458
1714	TP1700	662584.092	2998580.497	88° 38' 24.087" E	27° 6' 0.295" N	63.61	111081.66	25°14'34"(R)	2072.136
1715	TP1701	662619.888	2998633.084	88° 38' 25.411" E	27° 6' 1.988" N	28.85	111145.28	9°17'41"(R)	2068.812
1716	TP1702	662639.759	2998653.996	88° 38' 26.143" E	27° 6' 2.659" N	37.67	111174.12	28°58'41"(R)	2066.873

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
1717	TP1703	662649.230	2998690.461	88° 38' 26.504" E	27° 6' 3.840" N	29.84	111211.80	56°27'36"(R)	2065.119
1718	TP1704	662677.447	2998700.166	88° 38' 27.533" E	27° 6' 4.143" N	54.71	111241.64	27°7'16"(L)	2063.761
1719	TP1705	662715.383	2998739.589	88° 38' 28.929" E	27° 6' 5.408" N	44.89	111296.35	23°55'1"(L)	2061.335
1720	TP1706	662730.723	2998781.777	88° 38' 29.505" E	27° 6' 6.772" N	54.29	111341.24	69°56'39"(R)	2059.126
1721	TP1707	662785.008	2998781.847	88° 38' 31.476" E	27° 6' 6.751" N	26.42	111395.52	12°11'12"(L)	2056.085
1722	TP1708	662810.823	2998787.457	88° 38' 32.416" E	27° 6' 6.922" N	29.99	111421.94	42°18'33"(L)	2054.740
1723	TP1709	662828.209	2998811.894	88° 38' 33.059" E	27° 6' 7.709" N	54.17	111451.93	39°33'35"(R)	2052.899
1724	TP1710	662824.308	2998865.927	88° 38' 32.943" E	27° 6' 9.466" N	54.85	111506.11	43°34'31"(R)	2048.656
1725	TP1711	662859.154	2998908.280	88° 38' 34.228" E	27° 6' 10.827" N	27.63	111560.95	40°23'49"(L)	2045.024
1726	TP1712	662858.695	2998935.903	88° 38' 34.224" E	27° 6' 11.725" N	22.51	111588.58	69°33'30"(L)	2044.350
1727	TP1713	662837.477	2998943.413	88° 38' 33.458" E	27° 6' 11.978" N	39.28	111611.09	22°48'52"(L)	2043.711
1728	TP1714	662798.267	2998941.136	88° 38' 32.033" E	27° 6' 11.921" N	59.21	111650.36	12°25'52"(R)	2043.130
1729	TP1715	662739.804	2998950.508	88° 38' 29.915" E	27° 6' 12.250" N	35.42	111709.57	10°18'39"(R)	2042.391
1730	TP1716	662706.401	2998962.283	88° 38' 28.708" E	27° 6' 12.647" N	45.50	111744.99	18°10'17"(R)	2042.504
1731	TP1717	662670.348	2998990.038	88° 38' 27.412" E	27° 6' 13.564" N	29.30	111790.49	5°28'14"(L)	2043.682
1732	TP1718	662645.532	2999005.616	88° 38' 26.519" E	27° 6' 14.080" N	56.09	111819.79	14°23'14"(L)	2045.243
1733	TP1719	662592.102	2999022.700	88° 38' 24.587" E	27° 6' 14.658" N	36.33	111875.88	20°0'17"(R)	2046.857
1734	TP1720	662563.372	2999044.935	88° 38' 23.555" E	27° 6' 15.392" N	30.43	111912.21	6°32'5"(R)	2047.463
1735	TP1721	662541.582	2999066.177	88° 38' 22.774" E	27° 6' 16.092" N	14.20	111942.64	43°53'26"(L)	2046.962
1736	TP1722	662527.385	2999066.272	88° 38' 22.258" E	27° 6' 16.101" N	132.97	111956.84	23°7'47"(R)	2045.849
1737	TP1723	662405.450	2999119.317	88° 38' 17.857" E	27° 6' 17.876" N	30.21	112089.81	8°1'59"(L)	2039.845
1738	TP1724	662376.334	2999127.379	88° 38' 16.804" E	27° 6' 18.150" N	30.90	112120.03	10°36'3"(L)	2039.052
1739	TP1725	662345.549	2999130.005	88° 38' 15.687" E	27° 6' 18.249" N	9.85	112150.92	89°47'11"(L)	2037.902
1740	TP1726	662344.675	2999120.195	88° 38' 15.651" E	27° 6' 17.930" N	11.88	112160.77	54°15'8"(R)	2037.735
1741	TP1727	662334.455	2999114.137	88° 38' 15.277" E	27° 6' 17.738" N	9.49	112172.65	44°39'26"(L)	2036.529
1742	TP1728	662332.050	2999104.960	88° 38' 15.185" E	27° 6' 17.441" N	152.39	112182.14	86°46'35"(L)	2036.008
1743	TP1729	662477.059	2999058.099	88° 38' 20.428" E	27° 6' 15.857" N	10.41	112334.53	24°48'17"(R)	2026.028
1744	TP1730	662484.711	2999051.034	88° 38' 20.702" E	27° 6' 15.624" N	14.91	112344.95	78°10'30"(R)	2024.633
1745	TP1731	662472.568	2999042.385	88° 38' 20.257" E	27° 6' 15.348" N	17.34	112359.86	35°8'34"(R)	2023.300
1746	TP1732	662455.339	2999044.347	88° 38' 19.633" E	27° 6' 15.419" N	34.47	112377.20	1°26'56"(L)	2022.367
1747	TP1733	662421.004	2999047.381	88° 38' 18.388" E	27° 6' 15.532" N	66.49	112411.67	3°25'24"(L)	2019.251
1748	TP1734	662354.539	2999049.268	88° 38' 15.975" E	27° 6' 15.622" N	25.98	112478.16	5°45'7"(L)	2015.949
1749	TP1735	662328.628	2999047.399	88° 38' 15.034" E	27° 6' 15.572" N	57.20	112504.14	7°19'17"(L)	2014.193
1750	TP1736	662272.566	2999036.046	88° 38' 12.993" E	27° 6' 15.227" N	8.60	112561.34	85°46'21"(L)	2010.974
1751	TP1737	662274.888	2999027.770	88° 38' 13.074" E	27° 6' 14.957" N	6.04	112569.93	86°29'42"(R)	2010.231
1752	TP1738	662269.627	2999024.808	88° 38' 12.881" E	27° 6' 14.863" N	10.73	112575.97	71°28'19"(L)	2009.985
1753	TP1739	662271.648	2999014.273	88° 38' 12.950" E	27° 6' 14.520" N	8.14	112586.70	65°55'54"(L)	2009.294
1754	TP1740	662279.571	2999012.412	88° 38' 13.236" E	27° 6' 14.456" N	59.07	112594.83	26°50'43"(L)	2008.842
1755	TP1741	662336.977	2999026.335	88° 38' 15.327" E	27° 6' 14.884" N	33.87	112653.91	9°23'40"(R)	2007.611
1756	TP1742	662370.751	2999028.838	88° 38' 16.554" E	27° 6' 14.951" N	62.99	112687.77	15°33'3"(R)	2007.730
1757	TP1743	662432.517	2999016.481	88° 38' 18.791" E	27° 6' 14.523" N	30.61	112750.76	8°15'34"(L)	2006.830
1758	TP1744	662463.088	2999014.851	88° 38' 19.900" E	27° 6' 14.458" N	27.06	112781.38	18°42'29"(R)	2005.936
1759	TP1745	662488.224	2999004.817	88° 38' 20.808" E	27° 6' 14.121" N	19.94	112808.44	37°44'26"(R)	2004.749
1760	TP1746	662498.343	2998987.637	88° 38' 21.167" E	27° 6' 13.558" N	22.34	112828.38	85°51'25"(R)	2004.286
1761	TP1747	662478.385	2998977.598	88° 38' 20.438" E	27° 6' 13.241" N	9.65	112850.72	78°6'43"(R)	2003.057
1762	TP1748	662476.553	2998987.071	88° 38' 20.376" E	27° 6' 13.549" N	29.46	112860.37	68°42'22"(L)	2002.848
1763	TP1749	662449.320	2998998.297	88° 38' 19.392" E	27° 6' 13.926" N	27.76	112889.82	14°10'20"(L)	2001.899
1764	TP1750	662421.846	2999002.270	88° 38' 18.397" E	27° 6' 14.066" N	27.42	112917.58	6°49'8"(L)	2000.741
1765	TP1751	662394.433	2999002.945	88° 38' 17.402" E	27° 6' 14.100" N	31.60	112945.01	7°44'19"(R)	1999.402
1766	TP1752	662363.236	2999007.969	88° 38' 16.272" E	27° 6' 14.276" N	15.12	112976.60	17°26'55"(L)	1998.258
1767	TP1753	662348.270	2999005.786	88° 38' 15.727" E	27° 6' 14.212" N	33.11	112991.73	34°56'19"(L)	1997.570
1768	TP1754	662324.151	2998983.106	88° 38' 14.841" E	27° 6' 13.485" N	31.14	113024.84	11°1'1"(R)	1995.169
1769	TP1755	662297.803	2998966.500	88° 38' 13.877" E	27° 6' 12.957" N	27.08	113055.98	31°12'51"(R)	1993.677
1770	TP1756	662270.726	2998966.024	88° 38' 12.893" E	27° 6' 12.953" N	31.53	113083.06	8°21'55"(R)	1991.946
1771	TP1757	662239.452	2998970.062	88° 38' 11.760" E	27° 6' 13.097" N	68.65	113114.60	15°57'52"(L)	1991.096
1772	TP1758	662171.574	2998959.789	88° 38' 9.291" E	27° 6' 12.792" N	29.58	113183.25	37°18'31"(L)	1988.831
1773	TP1759	662150.996	2998938.543	88° 38' 8.534" E	27° 6' 12.110" N	31.68	113212.82	43°30'3"(L)	1987.248
1774	TP1760	662150.673	2998906.867	88° 38' 8.507" E	27° 6' 11.081" N	44.52	113244.50	58°59'12"(R)	1984.389
1775	TP1761	662112.284	2998884.318	88° 38' 7.103" E	27° 6' 10.365" N	50.74	113289.02	7°18'10"(R)	1982.720
1776	TP1762	662065.623	2998864.390	88° 38' 5.400" E	27° 6' 9.737" N	26.04	113339.76	24°20'44"(L)	1981.169
1777	TP1763	662048.024	2998845.203	88° 38' 4.752" E	27° 6' 9.121" N	42.24	113365.80	38°42'14"(L)	1980.776
1778	TP1764	662045.207	2998803.060	88° 38' 4.629" E	27° 6' 7.753" N	10.01	113408.03	28°9'48"(R)	1978.328
1779	TP1765	662039.903	2998794.567	88° 38' 4.433" E	27° 6' 7.480" N	65.47	113418.05	39°46'4"(R)	1977.468
1780	TP1766	661977.720	2998774.069	88° 38' 2.166" E	27° 6' 6.840" N	58.93	113483.52	10°40'7"(L)	1976.122
1781	TP1767	661926.132	2998745.575	88° 38' 0.280" E	27° 6' 5.936" N	28.55	113542.46	33°35'2"(L)	1974.645
1782	TP1768	661912.946	2998720.249	88° 37' 59.789" E	27° 6' 5.119" N	13.96	113571.01	31°2'2"(R)	1973.061

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
1783	TP1769	661901.035	2998712.960	88° 37' 59.353" E	27° 6' 4.887" N	41.05	113584.97	35°23'54"(R)	1972.593
1784	TP1770	661860.084	2998715.777	88° 37' 57.868" E	27° 6' 4.996" N	34.07	113626.02	15°30'57"(L)	1972.006
1785	TP1771	661826.710	2998708.938	88° 37' 56.653" E	27° 6' 4.788" N	28.55	113660.09	30°42'49"(R)	1969.738
1786	TP1772	661799.736	2998718.296	88° 37' 55.678" E	27° 6' 5.103" N	21.77	113688.64	21°15'14"(L)	1969.070
1787	TP1773	661777.981	2998717.491	88° 37' 54.888" E	27° 6' 5.086" N	36.77	113710.41	35°8'21"(L)	1968.648
1788	TP1774	661748.714	2998695.227	88° 37' 53.815" E	27° 6' 4.375" N	28.39	113747.18	11°10'49"(R)	1965.768
1789	TP1775	661723.210	2998682.744	88° 37' 52.883" E	27° 6' 3.980" N	63.74	113775.58	4°28'52"(R)	1964.580
1790	TP1776	661663.949	2998659.282	88° 37' 50.721" E	27° 6' 3.243" N	89.26	113839.31	12°27'36"(L)	1959.787
1791	TP1777	661589.999	2998609.291	88° 37' 48.013" E	27° 6' 1.650" N	23.85	113928.58	17°42'25"(L)	1955.116
1792	TP1778	661575.238	2998590.556	88° 37' 47.468" E	27° 6' 1.048" N	35.32	113952.43	27°32'40"(L)	1955.101
1793	TP1779	661568.686	2998555.845	88° 37' 47.214" E	27° 5' 59.923" N	26.80	113987.75	2°36'43"(L)	1954.508
1794	TP1780	661564.920	2998529.311	88° 37' 47.065" E	27° 5' 59.062" N	32.28	114014.55	9°14'14"(L)	1954.146
1795	TP1781	661565.573	2998497.037	88° 37' 47.073" E	27° 5' 58.013" N	19.71	114046.83	21°3'26"(R)	1954.169
1796	TP1782	661558.864	2998478.501	88° 37' 46.821" E	27° 5' 57.414" N	51.28	114066.54	77°20'0"(R)	1952.874
1797	TP1783	661507.987	2998484.956	88° 37' 44.977" E	27° 5' 57.645" N	36.86	114117.83	18°19'36"(L)	1950.985
1798	TP1784	661471.820	2998477.863	88° 37' 43.661" E	27° 5' 57.430" N	10.71	114154.69	17°56'39"(R)	1949.168
1799	TP1785	661461.185	2998479.140	88° 37' 43.275" E	27° 5' 57.476" N	9.44	114165.40	42°7'27"(R)	1948.869
1800	TP1786	661454.986	2998486.265	88° 37' 43.054" E	27° 5' 57.710" N	33.38	114174.84	18°27'17"(R)	1949.070
1801	TP1787	661442.171	2998517.091	88° 37' 42.603" E	27° 5' 58.717" N	29.52	114208.22	33°41'34"(L)	1948.819
1802	TP1788	661417.625	2998533.483	88° 37' 41.720" E	27° 5' 59.260" N	52.84	114237.74	31°29'11"(L)	1947.539
1803	TP1789	661364.827	2998535.555	88° 37' 39.804" E	27° 5' 59.349" N	62.55	114290.58	12°6'20"(L)	1945.808
1804	TP1790	661303.203	2998524.847	88° 37' 37.562" E	27° 5' 59.027" N	46.05	114353.13	8°27'2"(R)	1944.549
1805	TP1791	661257.163	2998523.717	88° 37' 35.890" E	27° 5' 59.010" N	22.43	114399.18	19°25'43"(L)	1943.734
1806	TP1792	661236.201	2998515.739	88° 37' 35.125" E	27° 5' 58.759" N	30.15	114421.61	35°8'58"(L)	1942.881
1807	TP1793	661219.332	2998490.744	88° 37' 34.501" E	27° 5' 57.954" N	29.48	114451.76	7°5'25"(L)	1940.337
1808	TP1794	661205.981	2998464.456	88° 37' 34.004" E	27° 5' 57.106" N	16.06	114481.25	28°3'12"(R)	1938.504
1809	TP1795	661192.827	2998455.238	88° 37' 33.522" E	27° 5' 56.812" N	35.43	114497.31	21°46'58"(R)	1938.449
1810	TP1796	661158.342	2998447.125	88° 37' 32.267" E	27° 5' 56.563" N	24.97	114532.74	33°22'52"(L)	1937.915
1811	TP1797	661141.191	2998428.976	88° 37' 31.636" E	27° 5' 55.980" N	23.49	114557.71	9°46'50"(L)	1936.805
1812	TP1798	661128.194	2998409.412	88° 37' 31.154" E	27° 5' 55.350" N	18.96	114581.20	46°4'46"(R)	1935.701
1813	TP1799	661109.543	2998406.016	88° 37' 30.476" E	27° 5' 55.248" N	35.80	114600.15	35°15'17"(R)	1934.806
1814	TP1800	661077.080	2998421.108	88° 37' 29.304" E	27° 5' 55.752" N	15.24	114635.95	22°49'58"(R)	1933.718
1815	TP1801	661066.835	2998432.394	88° 37' 28.938" E	27° 5' 56.123" N	41.54	114651.19	47°58'44"(R)	1932.905
1816	TP1802	661070.993	2998473.724	88° 37' 29.108" E	27° 5' 57.464" N	25.73	114692.73	68°25'49"(L)	1931.523
1817	TP1803	661048.135	2998485.529	88° 37' 28.284" E	27° 5' 57.857" N	28.75	114718.46	44°19'30"(L)	1930.639
1818	TP1804	661020.647	2998477.120	88° 37' 27.282" E	27° 5' 57.595" N	22.43	114747.21	23°8'23"(R)	1928.266
1819	TP1805	660998.344	2998479.515	88° 37' 26.474" E	27° 5' 57.682" N	22.14	114769.64	20°4'17"(R)	1926.738
1820	TP1806	660978.481	2998489.290	88° 37' 25.757" E	27° 5' 58.008" N	20.63	114791.78	33°19'33"(L)	1927.047
1821	TP1807	660958.013	2998486.731	88° 37' 25.013" E	27° 5' 57.934" N	42.52	114812.40	37°20'26"(L)	1926.702
1822	TP1808	660927.666	2998456.945	88° 37' 23.897" E	27° 5' 56.979" N	31.09	114854.92	54°15'57"(L)	1925.059
1823	TP1809	660932.385	2998426.218	88° 37' 24.054" E	27° 5' 55.978" N	34.92	114886.01	11°18'4"(L)	1923.280
1824	TP1810	660944.347	2998393.411	88° 37' 24.473" E	27° 5' 54.908" N	13.26	114920.93	47°30'28"(L)	1920.976
1825	TP1811	660938.228	2998381.644	88° 37' 24.245" E	27° 5' 54.528" N	23.81	114934.19	77°31'45"(L)	1919.490
1826	TP1812	660915.228	2998387.809	88° 37' 23.413" E	27° 5' 54.738" N	22.24	114958.01	5°51'49"(L)	1919.001
1827	TP1813	660893.275	2998391.341	88° 37' 22.618" E	27° 5' 54.862" N	48.35	114980.24	24°43'16"(L)	1918.137
1828	TP1814	660846.706	2998378.356	88° 37' 20.921" E	27° 5' 54.459" N	25.31	115028.59	27°2'20"(L)	1916.163
1829	TP1815	660828.079	2998361.216	88° 37' 20.237" E	27° 5' 53.910" N	21.28	115053.90	48°13'6"(L)	1915.293
1830	TP1816	660828.390	2998339.939	88° 37' 20.239" E	27° 5' 53.219" N	26.43	115075.18	18°27'33"(L)	1914.478
1831	TP1817	660837.123	2998314.998	88° 37' 20.544" E	27° 5' 52.405" N	9.34	115101.61	9°35'46"(R)	1913.481
1832	TP1818	660838.696	2998305.794	88° 37' 20.597" E	27° 5' 52.105" N	35.11	115110.94	79°23'11"(R)	1912.288
1833	TP1819	660805.774	2998293.606	88° 37' 19.396" E	27° 5' 51.723" N	30.83	115146.05	25°30'59"(L)	1911.090
1834	TP1820	660784.290	2998271.490	88° 37' 18.606" E	27° 5' 51.014" N	30.37	115176.88	24°27'54"(L)	1910.801
1835	TP1821	660774.052	2998242.901	88° 37' 18.221" E	27° 5' 50.089" N	22.82	115207.25	38°59'26"(L)	1909.229
1836	TP1822	660781.588	2998221.365	88° 37' 18.484" E	27° 5' 49.386" N	14.80	115230.07	5°48'53"(R)	1908.440
1837	TP1823	660787.869	2998207.958	88° 37' 18.706" E	27° 5' 48.948" N	7.64	115244.87	37°55'36"(R)	1907.253
1838	TP1824	660786.172	2998200.506	88° 37' 18.641" E	27° 5' 48.707" N	6.27	115252.51	7°40'42"(R)	1906.494
1839	TP1825	660783.976	2998194.634	88° 37' 18.558" E	27° 5' 48.517" N	20.68	115258.78	45°29'34"(R)	1905.375
1840	TP1826	660765.080	2998186.219	88° 37' 17.868" E	27° 5' 48.251" N	24.71	115279.47	9°34'5"(R)	1904.666
1841	TP1827	660741.149	2998180.059	88° 37' 16.997" E	27° 5' 48.061" N	4.82	115304.18	17°27'28"(R)	1903.313
1842	TP1828	660736.339	2998180.313	88° 37' 16.822" E	27° 5' 48.071" N	16.71	115308.99	13°29'8"(R)	1903.283
1843	TP1829	660720.317	2998185.061	88° 37' 16.243" E	27° 5' 48.232" N	44.43	115325.71	12°51'19"(R)	1902.635
1844	TP1830	660681.592	2998206.849	88° 37' 14.847" E	27° 5' 48.956" N	22.45	115370.14	30°52'20"(L)	1902.151
1845	TP1831	660659.146	2998206.258	88° 37' 14.032" E	27° 5' 48.947" N	19.04	115392.59	55°29'48"(L)	1901.958
1846	TP1832	660648.779	2998190.291	88° 37' 13.648" E	27° 5' 48.432" N	70.49	115411.63	26°32'10"(L)	1901.048
1847	TP1833	660640.851	2998120.246	88° 37' 13.328" E	27° 5' 46.160" N	44.15	115482.12	7°4'10"(L)	1897.340
1848	TP1834	660641.322	2998076.103	88° 37' 13.324" E	27° 5' 44.725" N	65.66	115526.27	0°31'4"(L)	1896.424

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S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
1849	TP1835	660642.616	2998010.455	88° 37' 13.340" E	27° 5' 42.592" N	40.45	115591.93	20°29'35"(R)	1895.461
1850	TP1836	660629.203	2997972.290	88° 37' 12.836" E	27° 5' 41.358" N	15.86	115632.38	86°3'20"(R)	1894.193
1851	TP1837	660613.910	2997976.508	88° 37' 12.283" E	27° 5' 41.501" N	74.97	115648.25	83°49'25"(R)	1893.411
1852	TP1838	660625.952	2998050.502	88° 37' 12.754" E	27° 5' 43.900" N	18.80	115723.21	23°40'26"(R)	1890.514
1853	TP1839	660636.166	2998066.281	88° 37' 13.132" E	27° 5' 44.408" N	26.99	115742.01	33°30'4"(L)	1889.667
1854	TP1840	660635.891	2998093.271	88° 37' 13.135" E	27° 5' 45.285" N	26.62	115769.00	23°38'45"(L)	1888.995
1855	TP1841	660624.966	2998117.545	88° 37' 12.750" E	27° 5' 46.079" N	93.84	115795.62	27°40'25"(L)	1887.646
1856	TP1842	660551.117	2998175.443	88° 37' 10.096" E	27° 5' 47.991" N	34.57	115889.46	13°10'30"(L)	1885.396
1857	TP1843	660519.764	2998190.011	88° 37' 8.965" E	27° 5' 48.477" N	25.48	115924.03	30°5'6"(R)	1883.135
1858	TP1844	660505.155	2998210.880	88° 37' 8.444" E	27° 5' 49.161" N	27.25	115949.51	10°35'32"(R)	1881.348
1859	TP1845	660493.897	2998235.697	88° 37' 8.047" E	27° 5' 49.972" N	24.17	115976.76	7°6'44"(L)	1880.539
1860	TP1846	660481.263	2998256.302	88° 37' 7.598" E	27° 5' 50.647" N	30.95	116000.93	2°44'19"(L)	1879.536
1861	TP1847	660456.143	2998274.384	88° 37' 6.695" E	27° 5' 51.245" N	13.62	116031.88	11°16'10"(R)	1877.733
1862	TP1848	660446.856	2998284.349	88° 37' 6.362" E	27° 5' 51.573" N	35.17	116045.50	51°31'32"(R)	1877.453
1863	TP1849	660429.739	2998315.072	88° 37' 5.755" E	27° 5' 52.578" N	25.77	116080.67	5°58'55"(L)	1877.031
1864	TP1850	660414.917	2998336.157	88° 37' 5.227" E	27° 5' 53.269" N	28.82	116106.44	35°51'7"(L)	1876.759
1865	TP1851	660387.674	2998345.561	88° 37' 4.242" E	27° 5' 53.586" N	24.55	116135.26	58°51'50"(L)	1876.483
1866	TP1852	660368.817	2998329.837	88° 37' 3.550" E	27° 5' 53.083" N	16.73	116159.82	9°33'31"(L)	1874.775
1867	TP1853	660357.927	2998317.141	88° 37' 3.149" E	27° 5' 52.675" N	14.27	116176.54	18°6'28"(R)	1873.646
1868	TP1854	660345.728	2998309.732	88° 37' 2.703" E	27° 5' 52.439" N	12.59	116190.82	11°48'55"(R)	1873.250
1869	TP1855	660333.145	2998309.391	88° 37' 2.246" E	27° 5' 52.434" N	18.47	116203.40	29°43'18"(R)	1873.099
1870	TP1856	660314.971	2998312.682	88° 37' 1.588" E	27° 5' 52.548" N	27.56	116221.87	5°33'51"(R)	1872.890
1871	TP1857	660288.458	2998320.199	88° 37' 0.629" E	27° 5' 52.803" N	23.21	116249.43	35°18'17"(L)	1872.384
1872	TP1858	660266.572	2998312.459	88° 36' 59.831" E	27° 5' 52.561" N	14.24	116272.65	21°48'1"(R)	1871.665
1873	TP1859	660252.348	2998313.036	88° 36' 59.315" E	27° 5' 52.586" N	23.56	116286.88	11°27'56"(L)	1871.393
1874	TP1860	660229.090	2998309.294	88° 36' 58.469" E	27° 5' 52.474" N	18.97	116310.44	32°22'42"(L)	1870.631
1875	TP1861	660214.886	2998296.719	88° 36' 57.947" E	27° 5' 52.071" N	33.59	116329.41	19°43'37"(R)	1869.467
1876	TP1862	660183.701	2998284.250	88° 36' 56.809" E	27° 5' 51.679" N	25.50	116362.99	27°5'23"(R)	1867.843
1877	TP1863	660158.307	2998286.604	88° 36' 55.888" E	27° 5' 51.766" N	63.01	116388.50	41°9'40"(R)	1867.115
1878	TP1864	660114.900	2998332.280	88° 36' 54.334" E	27° 5' 53.268" N	16.35	116451.51	33°51'31"(L)	1866.180
1879	TP1865	660098.945	2998335.846	88° 36' 53.756" E	27° 5' 53.391" N	19.95	116467.86	48°32'58"(L)	1865.842
1880	TP1866	660082.796	2998324.135	88° 36' 53.165" E	27° 5' 53.017" N	33.48	116487.81	16°28'8"(L)	1864.496
1881	TP1867	660062.380	2998297.606	88° 36' 52.411" E	27° 5' 52.164" N	19.56	116521.28	33°45'39"(R)	1862.119
1882	TP1868	660043.850	2998291.349	88° 36' 51.736" E	27° 5' 51.968" N	34.41	116540.84	33°22'15"(R)	1861.393
1883	TP1869	660010.571	2998300.088	88° 36' 50.532" E	27° 5' 52.266" N	31.57	116575.25	24°9'31"(L)	1860.294
1884	TP1870	659979.432	2998294.908	88° 36' 49.399" E	27° 5' 52.111" N	43.52	116606.81	28°28'40"(L)	1859.154
1885	TP1871	659945.105	2998268.162	88° 36' 48.140" E	27° 5' 51.256" N	39.39	116650.33	7°22'18"(R)	1857.448
1886	TP1872	659911.187	2998248.142	88° 36' 46.900" E	27° 5' 50.620" N	20.58	116689.71	8°48'38"(R)	1855.867
1887	TP1873	659892.074	2998240.520	88° 36' 46.202" E	27° 5' 50.380" N	50.26	116710.29	51°17'39"(R)	1853.917
1888	TP1874	659848.356	2998265.308	88° 36' 44.627" E	27° 5' 51.204" N	23.46	116760.55	23°24'56"(L)	1852.978
1889	TP1875	659825.026	2998267.817	88° 36' 43.781" E	27° 5' 51.295" N	13.49	116784.01	17°24'57"(R)	1852.335
1890	TP1876	659812.660	2998273.207	88° 36' 43.335" E	27° 5' 51.475" N	21.96	116797.50	5°27'46"(R)	1852.134
1891	TP1877	659793.459	2998283.858	88° 36' 42.643" E	27° 5' 51.829" N	18.89	116819.46	37°42'11"(L)	1851.724
1892	TP1878	659774.783	2998281.005	88° 36' 41.963" E	27° 5' 51.744" N	13.78	116838.35	35°30'24"(L)	1851.275
1893	TP1879	659764.904	2998271.400	88° 36' 41.600" E	27° 5' 51.436" N	12.32	116852.13	22°47'35"(L)	1851.275
1894	TP1880	659760.090	2998260.064	88° 36' 41.420" E	27° 5' 51.070" N	35.72	116864.45	5°3'7"(L)	1850.639
1895	TP1881	659749.076	2998226.090	88° 36' 41.004" E	27° 5' 49.971" N	29.53	116900.16	27°58'8"(R)	1847.943
1896	TP1882	659727.861	2998205.553	88° 36' 40.225" E	27° 5' 49.312" N	14.61	116929.69	6°57'25"(L)	1847.145
1897	TP1883	659718.669	2998194.191	88° 36' 39.886" E	27° 5' 48.947" N	67.80	116944.30	14°55'52"(R)	1848.263
1898	TP1884	659663.883	2998154.247	88° 36' 37.878" E	27° 5' 47.672" N	47.85	117012.10	5°59'49"(R)	1846.102
1899	TP1885	659622.487	2998130.252	88° 36' 36.365" E	27° 5' 46.910" N	10.59	117059.95	12°54'44"(L)	1844.526
1900	TP1886	659614.741	2998123.026	88° 36' 36.080" E	27° 5' 46.678" N	27.73	117070.54	29°6'47"(L)	1844.050
1901	TP1887	659606.230	2998096.638	88° 36' 35.759" E	27° 5' 45.824" N	18.93	117098.27	27°10'16"(R)	1842.575
1902	TP1888	659592.835	2998083.265	88° 36' 35.266" E	27° 5' 45.396" N	34.38	117117.20	6°16'57"(R)	1841.809
1903	TP1889	659565.994	2998061.784	88° 36' 34.282" E	27° 5' 44.709" N	15.76	117151.58	39°11'29"(R)	1840.200
1904	TP1890	659550.230	2998061.927	88° 36' 33.710" E	27° 5' 44.720" N	16.66	117167.34	32°47'52"(R)	1838.994
1905	TP1891	659536.308	2998071.079	88° 36' 33.209" E	27° 5' 45.023" N	19.83	117184.00	8°9'40"(R)	1838.011
1906	TP1892	659521.450	2998084.215	88° 36' 32.675" E	27° 5' 45.456" N	24.63	117203.83	54°9'32"(R)	1837.294
1907	TP1893	659523.870	2998108.722	88° 36' 32.775" E	27° 5' 46.251" N	31.19	117228.46	66°46'10"(L)	1836.851
1908	TP1894	659496.558	2998123.780	88° 36' 31.790" E	27° 5' 46.752" N	22.46	117259.65	40°55'11"(L)	1834.803
1909	TP1895	659474.594	2998119.091	88° 36' 30.991" E	27° 5' 46.609" N	9.40	117282.11	46°24'19"(R)	1832.865
1910	TP1896	659466.837	2998124.393	88° 36' 30.712" E	27° 5' 46.784" N	15.26	117291.50	24°23'30"(R)	1832.126
1911	TP1897	659458.921	2998137.437	88° 36' 30.430" E	27° 5' 47.211" N	25.25	117306.76	19°3'39"(L)	1830.723
1912	TP1898	659439.486	2998153.564	88° 36' 29.732" E	27° 5' 47.743" N	15.91	117332.02	46°12'56"(L)	1829.102
1913	TP1899	659423.677	2998151.755	88° 36' 29.157" E	27° 5' 47.691" N	21.48	117347.93	24°30'29"(L)	1828.336
1914	TP1900	659405.271	2998140.679	88° 36' 28.484" E	27° 5' 47.339" N	18.66	117369.41	62°30'53"(R)	1825.334

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
1915	TP1901	659389.357	2998150.422	88° 36' 27.911" E	27° 5' 47.662" N	26.90	117388.07	2°52'49"(R)	1824.334
1916	TP1902	659367.149	2998165.604	88° 36' 27.112" E	27° 5' 48.165" N	30.45	117414.97	13°12'5"(L)	1823.689
1917	TP1903	659338.747	2998176.595	88° 36' 26.086" E	27° 5' 48.533" N	31.64	117445.43	3°29'17"(L)	1821.398
1918	TP1904	659308.597	2998186.198	88° 36' 24.996" E	27° 5' 48.858" N	16.02	117477.07	24°57'30"(L)	1819.750
1919	TP1905	659292.711	2998184.166	88° 36' 24.418" E	27° 5' 48.798" N	19.76	117493.08	17°49'6"(R)	1818.853
1920	TP1906	659273.284	2998187.776	88° 36' 23.715" E	27° 5' 48.924" N	31.59	117512.84	30°37'56"(R)	1818.323
1921	TP1907	659249.502	2998208.566	88° 36' 22.861" E	27° 5' 49.609" N	27.92	117544.43	9°23'37"(L)	1817.543
1922	TP1908	659225.763	2998223.265	88° 36' 22.006" E	27° 5' 50.097" N	29.08	117572.35	29°37'50"(L)	1815.638
1923	TP1909	659196.707	2998224.349	88° 36' 20.952" E	27° 5' 50.144" N	20.63	117601.43	27°34'57"(L)	1814.620
1924	TP1910	659178.075	2998215.483	88° 36' 20.271" E	27° 5' 49.864" N	42.51	117622.06	25°32'56"(R)	1813.235
1925	TP1911	659135.568	2998215.559	88° 36' 18.728" E	27° 5' 49.884" N	70.83	117664.57	17°10'4RE"(L)	1810.552
1926	TP1912	659067.853	2998194.772	88° 36' 16.260" E	27° 5' 49.236" N	17.75	117735.40	5°29'9"(R)	1807.488
1927	TP1913	659050.459	2998191.208	88° 36' 15.627" E	27° 5' 49.128" N	26.57	117753.16	10°56'4"(R)	1806.495
1928	TP1914	659023.889	2998190.908	88° 36' 14.663" E	27° 5' 49.129" N	17.62	117779.73	6°0'42"(L)	1805.735
1929	TP1915	659006.385	2998188.865	88° 36' 14.026" E	27° 5' 49.070" N	31.56	117797.35	24°41'29"(L)	1805.206
1930	TP1916	658979.435	2998172.448	88° 36' 13.040" E	27° 5' 48.548" N	17.77	117828.91	4°27'34"(R)	1803.147
1931	TP1917	658963.587	2998164.412	88° 36' 12.461" E	27° 5' 48.293" N	35.12	117846.68	34°30'41"(R)	1802.799
1932	TP1918	658928.781	2998169.070	88° 36' 11.200" E	27° 5' 48.459" N	31.32	117881.80	17°55'47"(L)	1801.260
1933	TP1919	658897.968	2998163.467	88° 36' 10.079" E	27° 5' 48.290" N	41.22	117913.11	6°42'4"(L)	1799.925
1934	TP1920	658858.548	2998151.409	88° 36' 8.642" E	27° 5' 47.914" N	10.04	117954.34	25°12'35"(L)	1798.433
1935	TP1921	658851.115	2998144.665	88° 36' 8.369" E	27° 5' 47.698" N	74.73	117964.37	13°40'2"(L)	1797.742
1936	TP1922	658809.201	2998082.793	88° 36' 6.819" E	27° 5' 45.705" N	54.66	118039.11	10°55'8"(R)	1794.335
1937	TP1923	658770.531	2998044.168	88° 36' 5.397" E	27° 5' 44.466" N	27.18	118093.76	24°49'0"(R)	1792.619
1938	TP1924	658745.016	2998034.806	88° 36' 4.467" E	27° 5' 44.173" N	22.79	118120.94	5°9'30"(R)	1792.995
1939	TP1925	658722.999	2998028.910	88° 36' 3.665" E	27° 5' 43.990" N	25.97	118143.73	35°57'40"(R)	1792.440
1940	TP1926	658698.745	2998038.206	88° 36' 2.789" E	27° 5' 44.302" N	29.88	118169.71	7°37'53"(R)	1792.996
1941	TP1927	658672.515	2998052.508	88° 36' 1.843" E	27° 5' 44.778" N	46.46	118199.58	10°49'5"(R)	1790.945
1942	TP1928	658636.625	2998082.009	88° 36' 0.554" E	27° 5' 45.751" N	39.88	118246.04	6°37'25"(L)	1787.879
1943	TP1929	658603.100	2998103.611	88° 35' 59.347" E	27° 5' 46.467" N	31.94	118285.92	10°43'29"(R)	1787.825
1944	TP1930	658579.941	2998125.604	88° 35' 58.516" E	27° 5' 47.191" N	35.16	118317.86	37°53'54"(L)	1787.069
1945	TP1931	658544.947	2998129.049	88° 35' 57.248" E	27° 5' 47.317" N	23.02	118353.02	17°28'41"®	1786.733
1946	TP1932	658523.774	2998138.080	88° 35' 56.483" E	27° 5' 47.620" N	21.92	118376.04	16°1'55"(R)	1786.162
1947	TP1933	658506.771	2998151.914	88° 35' 55.872" E	27° 5' 48.076" N	42.90	118397.96	17°57'42"(L)	1785.136
1948	TP1934	658466.767	2998167.407	88° 35' 54.427" E	27° 5' 48.596" N	42.94	118440.86	23°40'29"(L)	1782.401
1949	TP1935	658423.870	2998165.531	88° 35' 52.869" E	27° 5' 48.553" N	39.25	118483.80	15°47'42"(L)	1781.095
1950	TP1936	658386.603	2998153.206	88° 35' 51.511" E	27° 5' 48.168" N	22.49	118523.05	3°41'11"(R)	1780.012
1951	TP1937	658364.836	2998147.531	88° 35' 50.718" E	27° 5' 47.992" N	9.44	118545.55	9°52'19"(R)	1779.785
1952	TP1938	658355.426	2998146.751	88° 35' 50.376" E	27° 5' 47.971" N	19.26	118554.99	23°29'25"(R)	1779.450
1953	TP1939	658337.188	2998152.942	88° 35' 49.717" E	27° 5' 48.180" N	16.64	118574.25	5°37'45"(R)	1779.050
1954	TP1940	658322.029	2998159.811	88° 35' 49.170" E	27° 5' 48.409" N	15.42	118590.89	47°56'17"(R)	1778.341
1955	TP1941	658317.344	2998174.507	88° 35' 49.006" E	27° 5' 48.888" N	33.50	118606.32	37°4'3"(R)	1777.985
1956	TP1942	658328.462	2998206.106	88° 35' 49.424" E	27° 5' 49.910" N	37.32	118639.81	10°56'2"(L)	1776.485
1957	TP1943	658333.946	2998243.020	88° 35' 49.641" E	27° 5' 51.107" N	9.42	118677.13	12°1'30"(R)	1774.875
1958	TP1944	658337.242	2998251.848	88° 35' 49.764" E	27° 5' 51.393" N	16.05	118686.56	20°55'51"(R)	1774.657
1959	TP1945	658347.858	2998263.888	88° 35' 50.155" E	27° 5' 51.780" N	31.63	118702.61	8°9'50"(L)	1773.754
1960	TP1946	658365.197	2998290.342	88° 35' 50.797" E	27° 5' 52.632" N	82.23	118734.24	8°42'29"(L)	1772.651
1961	TP1947	658399.340	2998365.143	88° 35' 52.071" E	27° 5' 55.048" N	36.72	118816.46	35°56'43"(L)	1770.061
1962	TP1948	658392.075	2998401.136	88° 35' 51.824" E	27° 5' 56.221" N	63.03	118853.18	14°3'11"(R)	1767.784
1963	TP1949	658394.980	2998464.099	88° 35' 51.958" E	27° 5' 58.265" N	36.47	118916.21	14°54'36"(L)	1767.430
1964	TP1950	658387.232	2998499.732	88° 35' 51.693" E	27° 5' 59.426" N	15.48	118952.68	12°13'49"(R)	1765.346
1965	TP1951	658387.221	2998515.216	88° 35' 51.700" E	27° 5' 59.929" N	65.47	118968.16	19°41'49"(R)	1765.015
1966	TP1952	658409.249	2998576.874	88° 35' 52.528" E	27° 6' 1.923" N	36.58	119033.64	9°35'3"(L)	1763.852
1967	TP1953	658415.647	2998612.885	88° 35' 52.777" E	27° 6' 3.091" N	40.40	119070.21	8°52'42"(R)	1763.467
1968	TP1954	658428.769	2998651.095	88° 35' 53.271" E	27° 6' 4.327" N	90.05	119110.61	°55'78"(R)	1762.701
1969	TP1955	658469.470	2998731.418	88° 35' 54.786" E	27° 6' 6.919" N	46.30	119200.66	4°54'48"(R)	1760.244
1970	TP1956	658493.860	2998770.777	88° 35' 55.689" E	27° 6' 8.188" N	27.50	119246.96	16°16'24"(L)	1759.428
1971	TP1957	658501.216	2998797.280	88° 35' 55.969" E	27° 6' 9.046" N	25.52	119274.47	15°23'11"(L)	1759.862
1972	TP1958	658501.272	2998822.803	88° 35' 55.982" E	27° 6' 9.875" N	37.74	119299.99	3°48'13"(L)	1759.736
1973	TP1959	658498.851	2998860.466	88° 35' 55.912" E	27° 6' 11.100" N	34.08	119337.73	9°54'9"(L)	1758.281
1974	TP1960	658490.849	2998893.592	88° 35' 55.637" E	27° 6' 12.180" N	39.65	119371.81	14°26'19"(R)	1755.887
1975	TP1961	658491.443	2998933.241	88° 35' 55.677" E	27° 6' 13.468" N	18.51	119411.46	10°3'46"(L)	1754.629
1976	TP1962	658488.482	2998951.514	88° 35' 55.578" E	27° 6' 14.062" N	33.57	119429.97	45°41'29"(L)	1753.998
1977	TP1963	658461.018	2998970.819	88° 35' 54.589" E	27° 6' 14.701" N	42.54	119463.54	8°28'50"(R)	1752.105
1978	TP1964	658430.204	2999000.147	88° 35' 53.484" E	27° 6' 15.667" N	39.28	119506.08	5°39'45"(L)	1752.471
1979	TP1965	658399.217	2999024.289	88° 35' 52.370" E	27° 6' 16.464" N	49.36	119545.36	28°54'12"(R)	1752.504
1980	TP1966	658379.794	2999069.662	88° 35' 51.686" E	27° 6' 17.946" N	44.74	119594.72	45°32'59"(L)	1750.724

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
1981	TP1967	658338.099	2999085.898	88° 35' 50.180" E	27° 6' 18.491" N	26.18	119639.46	44°19'56"(R)	1752.205
1982	TP1968	658327.286	2999109.744	88° 35' 49.798" E	27° 6' 19.270" N	34.86	119665.65	10°5'59"(L)	1753.428
1983	TP1969	658307.548	2999138.472	88° 35' 49.095" E	27° 6' 20.211" N	55.97	119700.50	5°28'35"(L)	1754.302
1984	TP1970	658271.593	2999181.370	88° 35' 47.810" E	27° 6' 21.620" N	44.78	119756.48	34°46'8"(R)	1754.908
1985	TP1971	658267.535	2999225.967	88° 35' 47.683" E	27° 6' 23.071" N	22.95	119801.26	41°54'34"(L)	1756.276
1986	TP1972	658250.724	2999241.584	88° 35' 47.080" E	27° 6' 23.585" N	8.90	119824.20	88°20'59"(L)	1756.172
1987	TP1973	658244.481	2999235.240	88° 35' 46.850" E	27° 6' 23.381" N	30.79	119833.10	74°20'32"(R)	1755.975
1988	TP1974	658217.525	2999250.110	88° 35' 45.878" E	27° 6' 23.876" N	49.41	119863.89	7°42'11"(L)	1756.992
1989	TP1975	658171.451	2999267.963	88° 35' 44.214" E	27° 6' 24.475" N	33.03	119913.30	27°27'24"(R)	1756.577
1990	TP1976	658149.627	2999292.750	88° 35' 43.433" E	27° 6' 25.289" N	81.54	119946.33	17°41'59"(R)	1755.443
1991	TP1977	658116.900	2999367.435	88° 35' 42.279" E	27° 6' 27.729" N	91.17	120027.87	8°44'22"(R)	1754.457
1992	TP1978	658093.421	2999455.529	88° 35' 41.467" E	27° 6' 30.601" N	63.35	120119.04	49°22'30"(R)	1755.874
1993	TP1979	658129.260	2999507.770	88° 35' 42.793" E	27° 6' 32.283" N	94.41	120182.39	15°28'26"(L)	1756.311
1994	TP1980	658159.961	2999597.046	88° 35' 43.948" E	27° 6' 35.171" N	69.59	120276.80	15°36'47"(R)	1762.346
1995	TP1981	658199.469	2999654.336	88° 35' 45.409" E	27° 6' 37.016" N	34.62	120346.39	64°10'25"(L)	1765.034
1996	TP1982	658182.380	2999684.439	88° 35' 44.803" E	27° 6' 38.001" N	51.94	120381.00	13°33'26"(L)	1765.721
1997	TP1983	658146.864	2999722.339	88° 35' 43.531" E	27° 6' 39.247" N	26.86	120432.94	2°52'43"(L)	1766.932
1998	TP1984	658127.534	2999740.994	88° 35' 42.837" E	27° 6' 39.861" N	34.84	120459.81	2°52'43"(L)	1767.002
1999	TP1985	658099.398	2999761.546	88° 35' 41.825" E	27° 6' 40.541" N	38.94	120494.65	5°13'22"®	1766.837
2000	TP1986	658070.173	2999787.284	88° 35' 40.776" E	27° 6' 41.389" N	35.14	120533.59	9°55'42"(R)	1767.583
2001	TP1987	658048.203	2999814.705	88° 35' 39.991" E	27° 6' 42.289" N	38.39	120568.73	3°31'2"(R)	1767.540
2002	TP1988	658026.085	2999846.077	88° 35' 39.203" E	27° 6' 43.317" N	44.56	120607.12	3°25'26"(R)	1768.273
2003	TP1989	658002.630	2999883.964	88° 35' 38.368" E	27° 6' 44.558" N	85.57	120651.67	15°14'14"(R)	1769.031
2004	TP1990	657978.292	2999966.004	88° 35' 37.523" E	27° 6' 47.234" N	40.10	120737.25	20°52'24"(R)	1770.328
2005	TP1991	657981.333	3000005.984	88° 35' 37.651" E	27° 6' 48.531" N	48.67	120777.34	13°38'1"(R)	1771.325
2006	TP1992	657996.358	3000052.272	88° 35' 38.218" E	27° 6' 50.029" N	12.65	120826.01	67°36'42"(L)	1773.397
2007	TP1993	657986.718	3000060.468	88° 35' 37.872" E	27° 6' 50.299" N	37.61	120838.66	14°43'14"(L)	1773.483
2008	TP1994	657952.817	3000076.748	88° 35' 36.649" E	27° 6' 50.842" N	26.43	120876.27	37°7'41"(R)	1772.182
2009	TP1995	657940.729	3000100.248	88° 35' 36.221" E	27° 6' 51.611" N	39.51	120902.70	27°24'29"(R)	1770.695
2010	TP1996	657940.858	3000139.754	88° 35' 36.243" E	27° 6' 52.894" N	34.73	120942.20	2°34'16"(L)	1769.125
2011	TP1997	657939.414	3000174.451	88° 35' 36.207" E	27° 6' 54.022" N	26.06	120976.93	55°7'54"(L)	1767.648
2012	TP1998	657917.428	3000188.449	88° 35' 35.415" E	27° 6' 54.486" N	39.44	121002.99	5°14'55"(L)	1766.959
2013	TP1999	657882.357	3000206.501	88° 35' 34.150" E	27° 6' 55.087" N	30.96	121042.44	4°43'39"(L)	1765.495
2014	TP2000	657853.757	3000218.353	88° 35' 33.117" E	27° 6' 55.484" N	39.10	121073.40	7°9'17"(L)	1764.692
2015	TP2001	657816.049	3000228.707	88° 35' 31.753" E	27° 6' 55.836" N	78.82	121112.50	35°5'43"(R)	1762.589
2016	TP2002	657765.861	3000289.480	88° 35' 29.958" E	27° 6' 57.831" N	47.57	121191.32	11°59'27"(R)	1759.007
2017	TP2003	657743.850	3000331.655	88° 35' 29.179" E	27° 6' 59.210" N	35.71	121238.89	42°37'4"(R)	1756.466
2018	TP2004	657753.126	3000366.136	88° 35' 29.531" E	27° 7' 0.326" N	32.74	121274.60	22°38'29"(L)	1754.958
2019	TP2005	657748.805	3000398.589	88° 35' 29.389" E	27° 7' 1.383" N	32.13	121307.34	55°56'53"(L)	1751.877
2020	TP2006	657720.047	3000412.908	88° 35' 28.352" E	27° 7' 1.860" N	23.74	121339.46	17°6'55"(R)	1749.922
2021	TP2007	657702.848	3000429.277	88° 35' 27.735" E	27° 7' 2.399" N	30.77	121363.21	18°20'36"(R)	1748.823
2022	TP2008	657688.366	3000456.430	88° 35' 27.222" E	27° 7' 3.287" N	32.21	121393.98	7°25'44"(R)	1747.464
2023	TP2009	657677.009	3000486.574	88° 35' 26.823" E	27° 7' 4.271" N	32.00	121426.19	7°51'35"(L)	1745.983
2024	TP2010	657661.738	3000514.695	88° 35' 26.281" E	27° 7' 5.191" N	48.11	121458.19	3°55'5"(R)	1743.830
2025	TP2011	657641.722	3000558.442	88° 35' 25.575" E	27° 7' 6.620" N	97.84	121506.30	4°29'20"(L)	1741.612
2026	TP2012	657594.177	3000643.952	88° 35' 23.888" E	27° 7' 9.418" N	21.34	121604.14	20°54'27"(L)	1737.199
2027	TP2013	657577.833	3000657.675	88° 35' 23.301" E	27° 7' 9.871" N	23.35	121625.48	14°32'17"(L)	1735.982
2028	TP2014	657556.758	3000667.718	88° 35' 22.540" E	27° 7' 10.206" N	40.02	121648.83	12°25'1"(L)	1734.222
2029	TP2015	657517.776	3000676.763	88° 35' 21.129" E	27° 7' 10.515" N	29.76	121688.85	6°58'14"(R)	1731.798
2030	TP2016	657489.817	3000686.958	88° 35' 20.118" E	27° 7' 10.858" N	24.57	121718.61	10°3'45"(R)	1730.258
2031	TP2017	657468.556	3000699.280	88° 35' 19.352" E	27° 7' 11.267" N	19.98	121743.18	21°39'48"(R)	1729.207
2032	TP2018	657456.188	3000714.974	88° 35' 18.910" E	27° 7' 11.782" N	32.42	121763.16	23°35'42"(R)	1728.307
2033	TP2019	657447.990	3000746.342	88° 35' 18.627" E	27° 7' 12.805" N	36.82	121795.58	19°39'32"(R)	1728.317
2034	TP2020	657451.208	3000783.023	88° 35' 18.761" E	27° 7' 13.995" N	39.80	121832.40	7°16'20"(R)	1727.456
2035	TP2021	657459.677	3000821.914	88° 35' 19.086" E	27° 7' 15.255" N	37.23	121872.21	16°52'13"(L)	1725.965
2036	TP2022	657456.701	3000859.022	88° 35' 18.995" E	27° 7' 16.462" N	66.87	121909.43	31°59'16"(L)	1724.612
2037	TP2023	657416.859	3000912.723	88° 35' 17.573" E	27° 7' 18.223" N	30.39	121976.30	20°14'46"(R)	1723.202
2038	TP2024	657408.315	3000941.891	88° 35' 17.276" E	27° 7' 19.174" N	38.61	122006.69	25°59'17"(R)	1723.029
2039	TP2025	657414.795	3000979.955	88° 35' 17.529" E	27° 7' 20.408" N	55.11	122045.31	13°6'10"(R)	1722.373
2040	TP2026	657436.120	3001030.775	88° 35' 18.326" E	27° 7' 22.051" N	55.14	122100.42	4°37'35"(R)	1720.254
2041	TP2027	657461.488	3001079.733	88° 35' 19.270" E	27° 7' 23.631" N	24.92	122155.56	9°34'56"(L)	1718.978
2042	TP2028	657469.109	3001103.459	88° 35' 19.558" E	27° 7' 24.399" N	63.48	122180.48	28°8'42"(L)	1719.429
2043	TP2029	657457.718	3001165.913	88° 35' 19.173" E	27° 7' 26.433" N	59.31	122243.96	19°29'34"(L)	1719.346
2044	TP2030	657428.214	3001217.368	88° 35' 18.125" E	27° 7' 28.116" N	27.23	122303.28	14°46'36"(R)	1722.292
2045	TP2031	657421.141	3001243.668	88° 35' 17.880" E	27° 7' 28.974" N	98.88	122330.51	14°45'19"(R)	1722.301
2046	TP2032	657420.628	3001342.546	88° 35' 17.907" E	27° 7' 32.187" N	76.95	122429.39	17°21'8"(R)	1726.527

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S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
2047	TP2033	657443.195	3001416.109	88° 35' 18.760" E	27° 7' 34.567" N	22.60	122506.34	19°52'42"(L)	1727.589
2048	TP2034	657442.082	3001438.684	88° 35' 18.730" E	27° 7' 35.301" N	19.62	122528.94	10°55'13"(R)	1728.600
2049	TP2035	657444.846	3001458.113	88° 35' 18.840" E	27° 7' 35.931" N	26.94	122548.56	6°43'14"(R)	1729.355
2050	TP2036	657451.736	3001484.159	88° 35' 19.102" E	27° 7' 36.775" N	80.19	122575.51	3°22'48"(R)	1730.222
2051	TP2037	657476.779	3001560.340	88° 35' 20.046" E	27° 7' 39.240" N	16.55	122655.70	7°11'50"(R)	1732.011
2052	TP2038	657483.876	3001575.290	88° 35' 20.311" E	27° 7' 39.722" N	18.79	122672.25	9°1'19"(R)	1732.402
2053	TP2039	657494.497	3001590.792	88° 35' 20.703" E	27° 7' 40.222" N	93.56	122691.04	6°40'54"(R)	1732.810
2054	TP2040	657556.000	3001661.299	88° 35' 22.969" E	27° 7' 42.487" N	11.97	122784.60	14°42'1"(L)	1735.467
2055	TP2041	657561.324	3001672.025	88° 35' 23.167" E	27° 7' 42.833" N	13.94	122796.57	13°41'59"(R)	1735.801
2056	TP2042	657570.304	3001682.690	88° 35' 23.498" E	27° 7' 43.176" N	17.10	122810.52	68°48'43"(L)	1736.242
2057	TP2043	657562.089	3001697.686	88° 35' 23.207" E	27° 7' 43.667" N	38.13	122827.62	44°27'28"(R)	1736.659
2058	TP2044	657572.436	3001734.390	88° 35' 23.599" E	27° 7' 44.855" N	45.58	122865.75	11°23'16"(R)	1735.938
2059	TP2045	657593.224	3001774.959	88° 35' 24.373" E	27° 7' 46.165" N	37.21	122911.34	21°28'2"(L)	1733.152
2060	TP2046	657596.896	3001811.983	88° 35' 24.523" E	27° 7' 47.366" N	21.11	122948.54	29°3'35"(R)	1730.463
2061	TP2047	657608.919	3001829.331	88° 35' 24.968" E	27° 7' 47.925" N	19.23	122969.65	11°57'59"(R)	1729.125
2062	TP2048	657622.909	3001842.519	88° 35' 25.482" E	27° 7' 48.347" N	48.58	122988.87	26°40'52"(R)	1728.558
2063	TP2049	657669.454	3001856.420	88° 35' 27.179" E	27° 7' 48.780" N	5.93	123037.45	8°32'16"(L)	1726.803
2064	TP2050	657674.824	3001858.943	88° 35' 27.375" E	27° 7' 48.860" N	34.90	123043.38	19°57'0"(L)	1725.301
2065	TP2051	657699.455	3001883.674	88° 35' 28.280" E	27° 7' 49.653" N	74.13	123078.29	20°40'39"(L)	1724.303
2066	TP2052	657729.852	3001951.290	88° 35' 29.415" E	27° 7' 51.837" N	33.55	123152.42	4°9'24"(R)	1722.459
2067	TP2053	657745.791	3001980.814	88° 35' 30.008" E	27° 7' 52.790" N	16.17	123185.97	17°12'30"(R)	1722.216
2068	TP2054	657757.336	3001992.131	88° 35' 30.432" E	27° 7' 53.153" N	36.37	123202.14	11°50'30"(R)	1722.223
2069	TP2055	657787.982	3002011.720	88° 35' 31.554" E	27° 7' 53.777" N	15.96	123238.51	11°34'45"(R)	1723.413
2070	TP2056	657802.885	3002017.443	88° 35' 32.098" E	27° 7' 53.957" N	31.24	123254.48	26°39'7"(L)	1724.693
2071	TP2057	657823.925	3002040.533	88° 35' 32.873" E	27° 7' 54.698" N	54.81	123285.72	4°13'29"(R)	1724.411
2072	TP2058	657863.723	3002078.214	88° 35' 34.335" E	27° 7' 55.906" N	62.46	123340.52	1°50'26"(R)	1723.372
2073	TP2059	657910.431	3002119.675	88° 35' 36.050" E	27° 7' 57.234" N	57.24	123402.98	1°0'40"(R)	1719.842
2074	TP2060	657953.902	3002156.912	88° 35' 37.646" E	27° 7' 58.426" N	31.33	123460.22	3°0'11"(R)	1717.842
2075	TP2061	657978.732	3002176.020	88° 35' 38.556" E	27° 7' 59.036" N	63.30	123491.55	1°48'26"(R)	1717.897
2076	TP2062	658030.089	3002213.023	88° 35' 40.439" E	27° 8' 0.217" N	17.84	123554.85	24°43'12"(L)	1716.452
2077	TP2063	658038.878	3002228.553	88° 35' 40.765" E	27° 8' 0.718" N	37.80	123572.69	14°38'15"(L)	1715.153
2078	TP2064	658048.579	3002265.090	88° 35' 41.134" E	27° 8' 1.901" N	51.35	123610.49	8°23'37"(L)	1711.501
2079	TP2065	658054.371	3002316.116	88° 35' 41.368" E	27° 8' 3.557" N	23.56	123661.85	4°25'43"(R)	1706.112
2080	TP2066	658058.827	3002339.246	88° 35' 41.540" E	27° 8' 4.306" N	27.25	123685.40	11°18'50"(R)	1703.701
2081	TP2067	658069.131	3002364.472	88° 35' 41.926" E	27° 8' 5.122" N	32.20	123712.65	11°34'40"(R)	1700.991
2082	TP2068	658087.041	3002391.229	88° 35' 42.589" E	27° 8' 5.984" N	30.74	123744.85	10°12'19"(R)	1697.952
2083	TP2069	658108.395	3002413.341	88° 35' 43.374" E	27° 8' 6.693" N	25.28	123775.59	5°35'3"(L)	1695.229
2084	TP2070	658124.106	3002433.151	88° 35' 43.954" E	27° 8' 7.330" N	23.09	123800.87	16°8'12"(L)	1692.879
2085	TP2071	658132.860	3002454.516	88° 35' 44.282" E	27° 8' 8.021" N	30.81	123823.96	33°47'22"(L)	1690.189
2086	TP2072	658126.712	3002484.711	88° 35' 44.073" E	27° 8' 9.004" N	27.98	123854.78	45°31'43"(R)	1687.219
2087	TP2073	658142.365	3002507.900	88° 35' 44.652" E	27° 8' 9.751" N	30.56	123882.75	44°53'58"(R)	1684.995
2088	TP2074	658172.359	3002513.774	88° 35' 45.744" E	27° 8' 9.930" N	18.40	123913.32	6°18'49"(R)	1682.079
2089	TP2075	658190.694	3002515.303	88° 35' 46.410" E	27° 8' 9.972" N	24.42	123931.72	33°44'11"(L)	1680.217
2090	TP2076	658209.807	3002530.508	88° 35' 47.111" E	27° 8' 10.458" N	20.83	123956.14	31°15'13"(L)	1676.941
2091	TP2077	658217.013	3002550.048	88° 35' 47.382" E	27° 8' 11.090" N	35.00	123976.97	53°14'23"(L)	1674.867
2092	TP2078	658197.954	3002579.400	88° 35' 46.703" E	27° 8' 12.051" N	20.69	124011.96	60°37'59"(R)	1671.993
2093	TP2079	658207.551	3002597.729	88° 35' 47.060" E	27° 8' 12.643" N	37.73	124032.65	73°46'44"(R)	1669.611
2094	TP2080	658244.537	3002590.261	88° 35' 48.400" E	27° 8' 12.385" N	11.65	124070.39	63°34'47"(L)	1664.392
2095	TP2081	658251.684	3002599.463	88° 35' 48.664" E	27° 8' 12.681" N	28.67	124082.04	22°39'39"(L)	1662.729
2096	TP2082	658259.189	3002627.134	88° 35' 48.949" E	27° 8' 13.577" N	17.98	124110.71	41°25'3"(R)	1660.349
2097	TP2083	658274.201	3002637.035	88° 35' 49.499" E	27° 8' 13.892" N	15.40	124128.69	50°6'37"(R)	1660.486
2098	TP2084	658288.948	3002632.610	88° 35' 50.032" E	27° 8' 13.743" N	55.25	124144.09	29°3'51"(L)	1657.212
2099	TP2085	658342.913	3002644.437	88° 35' 51.998" E	27° 8' 14.105" N	75.57	124199.33	21°36'21"(L)	1650.865
2100	TP2086	658405.591	3002686.662	88° 35' 54.293" E	27° 8' 15.451" N	48.11	124274.91	8°12'33"(R)	1642.914
2101	TP2087	658448.916	3002707.567	88° 35' 55.876" E	27° 8' 16.112" N	8.62	124323.01	73°42'51"(R)	1640.060
2102	TP2088	658454.687	3002701.168	88° 35' 56.083" E	27° 8' 15.902" N	6.55	124331.63	19°48'49"(L)	1638.106
2103	TP2089	658457.692	3002695.343	88° 35' 56.189" E	27° 8' 15.711" N	26.88	124338.18	82°58'41"(R)	1637.238
2104	TP2090	658435.485	3002680.191	88° 35' 55.376" E	27° 8' 15.228" N	60.32	124365.07	25°59'28"(L)	1635.239
2105	TP2091	658405.596	3002627.794	88° 35' 54.266" E	27° 8' 13.538" N	17.53	124425.39	58°21'6"(L)	1629.832
2106	TP2092	658414.000	3002612.411	88° 35' 54.564" E	27° 8' 13.035" N	8.99	124442.92	85°6'43"(L)	1628.752
2107	TP2093	658422.226	3002616.033	88° 35' 54.865" E	27° 8' 13.149" N	70.21	124451.91	10°40'38"(L)	1623.128
2108	TP2094	658480.133	3002655.740	88° 35' 56.986" E	27° 8' 14.415" N	28.83	124522.12	9°54'9"(R)	1620.271
2109	TP2095	658506.357	3002667.711	88° 35' 57.944" E	27° 8' 14.793" N	32.73	124550.95	10°8'4"(R)	1617.637
2110	TP2096	658538.056	3002675.851	88° 35' 59.099" E	27° 8' 15.044" N	31.13	124583.67	7°50'49"(R)	1614.503
2111	TP2097	658568.986	3002679.405	88° 36' 0.224" E	27° 8' 15.147" N	32.76	124614.81	15°15'4"(R)	1611.770
2112	TP2098	658601.368	3002674.452	88° 36' 1.397" E	27° 8' 14.973" N	9.77	124647.57	28°8'46"(L)	1607.519

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
2113	TP2099	658610.578	3002677.704	88° 36' 1.733" E	27° 8' 15.075" N	20.16	124657.33	38°21'12"(L)	1606.415
2114	TP2100	658621.321	3002694.766	88° 36' 2.131" E	27° 8' 15.625" N	23.19	124677.50	12°47'20"(L)	1604.024
2115	TP2101	658629.027	3002716.639	88° 36' 2.421" E	27° 8' 16.332" N	32.90	124700.69	10°12'5"(R)	1601.739
2116	TP2102	658645.284	3002745.246	88° 36' 3.025" E	27° 8' 17.255" N	60.32	124733.59	10°5'21"(R)	1598.022
2117	TP2103	658683.813	3002791.657	88° 36' 4.445" E	27° 8' 18.747" N	35.61	124793.91	22°31'1"(L)	1592.150
2118	TP2104	658694.333	3002825.682	88° 36' 4.843" E	27° 8' 19.848" N	164.66	124829.52	2°4'49"(R)	1588.589
2119	TP2105	658748.651	3002981.124	88° 36' 6.888" E	27° 8' 24.875" N	92.56	124994.18	0°36'50"(R)	1573.159
2120	TP2106	658780.121	3003068.175	88° 36' 8.071" E	27° 8' 27.691" N	38.05	125086.75	7°47'58"(R)	1567.789
2121	TP2107	658797.794	3003101.873	88° 36' 8.728" E	27° 8' 28.778" N	35.92	125124.80	9°40'3"(R)	1565.302
2122	TP2108	658819.585	3003130.434	88° 36' 9.533" E	27° 8' 29.697" N	37.64	125160.72	19°19'24"(L)	1562.670
2123	TP2109	658831.228	3003166.227	88° 36' 9.972" E	27° 8' 30.855" N	27.59	125198.36	7°22'13"(R)	1560.059
2124	TP2110	658843.058	3003191.153	88° 36' 10.414" E	27° 8' 31.660" N	77.66	125225.95	4°38'24"(R)	1557.701
2125	TP2111	658881.920	3003258.385	88° 36' 11.856" E	27° 8' 33.828" N	26.43	125303.61	26°42'23"(L)	1553.793
2126	TP2112	658883.452	3003284.775	88° 36' 11.924" E	27° 8' 34.685" N	19.42	125330.04	4°16'5"(R)	1552.897
2127	TP2113	658886.017	3003304.021	88° 36' 12.026" E	27° 8' 35.309" N	28.50	125349.46	34°22'16"(R)	1552.430
2128	TP2114	658905.071	3003325.211	88° 36' 12.728" E	27° 8' 35.990" N	44.04	125377.96	13°39'24"(L)	1551.692
2129	TP2115	658925.951	3003363.981	88° 36' 13.504" E	27° 8' 37.241" N	28.87	125421.99	35°0'59"(R)	1551.114
2130	TP2116	658951.751	3003376.945	88° 36' 14.447" E	27° 8' 37.651" N	45.80	125450.86	8°42'1"(R)	1550.913
2131	TP2117	658995.317	3003391.082	88° 36' 16.036" E	27° 8' 38.092" N	58.47	125496.67	33°58'18"(L)	1549.484
2132	TP2118	659031.353	3003437.123	88° 36' 17.366" E	27° 8' 39.573" N	40.09	125555.13	39°45'50"(L)	1547.943
2133	TP2119	659030.154	3003477.194	88° 36' 17.341" E	27° 8' 40.876" N	24.77	125595.22	35°14'52"(R)	1544.592
2134	TP2120	659043.837	3003497.840	88° 36' 17.848" E	27° 8' 41.541" N	55.47	125619.99	38°56'32"(R)	1543.888
2135	TP2121	659096.736	3003514.543	88° 36' 19.776" E	27° 8' 42.061" N	15.41	125675.47	56°57'42"(L)	1544.117
2136	TP2122	659100.859	3003529.395	88° 36' 19.933" E	27° 8' 42.542" N	10.93	125690.88	26°59'18"(R)	1544.192
2137	TP2123	659108.247	3003537.456	88° 36' 20.205" E	27° 8' 42.801" N	66.75	125701.81	45°32'45"(L)	1543.831
2138	TP2124	659104.704	3003604.110	88° 36' 20.107" E	27° 8' 44.968" N	58.68	125768.56	18°19'6"(R)	1540.916
2139	TP2125	659120.164	3003660.716	88° 36' 20.695" E	27° 8' 46.801" N	56.72	125827.24	6°11'8"(L)	1538.468
2140	TP2126	659129.126	3003716.728	88° 36' 21.047" E	27° 8' 48.617" N	32.86	125883.96	7°2'28"(R)	1533.493
2141	TP2127	659138.255	3003748.291	88° 36' 21.393" E	27° 8' 49.639" N	17.65	125916.82	10°50'8"(R)	1531.501
2142	TP2128	659146.261	3003764.026	88° 36' 21.691" E	27° 8' 50.146" N	21.27	125934.48	20°3'59"(R)	1530.432
2143	TP2129	659161.828	3003778.525	88° 36' 22.263" E	27° 8' 50.611" N	30.32	125955.75	17°6'49"(R)	1529.892
2144	TP2130	659189.118	3003791.749	88° 36' 23.260" E	27° 8' 51.029" N	33.65	125986.07	27°27'29"(L)	1529.343
2145	TP2131	659209.221	3003818.730	88° 36' 24.003" E	27° 8' 51.898" N	29.71	126019.72	10°27'6"(L)	1528.857
2146	TP2132	659222.354	3003845.376	88° 36' 24.492" E	27° 8' 52.758" N	26.61	126049.43	30°33'38"(L)	1527.383
2147	TP2133	659220.348	3003871.910	88° 36' 24.432" E	27° 8' 53.621" N	65.81	126076.04	19°53'29"(R)	1525.502
2148	TP2134	659238.009	3003935.301	88° 36' 25.103" E	27° 8' 55.673" N	34.12	126141.84	41°34'30"(R)	1521.090
2149	TP2135	659266.670	3003953.812	88° 36' 26.152" E	27° 8' 56.262" N	48.53	126175.96	4°25'47"(R)	1520.425
2150	TP2136	659309.348	3003976.914	88° 36' 27.713" E	27° 8' 56.995" N	28.27	126224.49	26°28'13"(L)	1519.108
2151	TP2137	659325.607	3004000.046	88° 36' 28.314" E	27° 8' 57.740" N	63.01	126252.77	32°29'2"(L)	1517.109
2152	TP2138	659328.486	3004062.986	88° 36' 28.448" E	27° 8' 59.784" N	55.56	126315.77	5°44'54"(R)	1510.912
2153	TP2139	659336.570	3004117.950	88° 36' 28.767" E	27° 9' 1.566" N	5.86	126371.33	34°45'5"(R)	1507.012
2154	TP2140	659340.574	3004122.226	88° 36' 28.915" E	27° 9' 1.703" N	115.11	126377.19	18°36'36"(R)	1506.183
2155	TP2141	659441.957	3004176.750	88° 36' 32.622" E	27° 9' 3.433" N	33.21	126492.30	28°33'32"(L)	1503.926
2156	TP2142	659460.129	3004204.552	88° 36' 33.295" E	27° 9' 4.328" N	28.44	126525.51	8°19'57"(R)	1502.062
2157	TP2143	659478.974	3004225.851	88° 36' 33.989" E	27° 9' 5.012" N	51.99	126553.95	6°0'53"(L)	1499.870
2158	TP2144	659509.155	3004268.183	88° 36' 35.105" E	27° 9' 6.375" N	25.05	126605.94	23°38'42"(L)	1495.860
2159	TP2145	659514.296	3004292.701	88° 36' 35.303" E	27° 9' 7.170" N	33.27	126630.99	17°6'29"(R)	1494.202
2160	TP2146	659530.399	3004321.811	88° 36' 35.902" E	27° 9' 8.109" N	18.28	126664.26	12°11'48"(L)	1491.820
2161	TP2147	659535.669	3004339.317	88° 36' 36.101" E	27° 9' 8.675" N	40.23	126682.54	41°8'37"(L)	1490.048
2162	TP2148	659519.055	3004375.960	88° 36' 35.515" E	27° 9' 9.873" N	64.12	126722.78	55°53'57"(R)	1487.425
2163	TP2149	659552.568	3004430.628	88° 36' 36.758" E	27° 9' 11.635" N	45.66	126786.90	55°53'57"(R)	1482.470
2164	TP2150	659585.638	3004462.110	88° 36' 37.973" E	27° 9' 12.644" N	73.73	126832.56	29°2'25"(L)	1477.945
2165	TP2151	659607.647	3004532.475	88° 36' 38.806" E	27° 9' 14.921" N	30.01	126906.28	15°51'40"(R)	1471.402
2166	TP2152	659624.094	3004557.581	88° 36' 39.415" E	27° 9' 15.730" N	28.99	126936.30	7°28'13"(R)	1468.899
2167	TP2153	659643.000	3004579.560	88° 36' 40.112" E	27° 9' 16.436" N	42.84	126965.29	21°46'17"(R)	1466.061
2168	TP2154	659680.990	3004599.360	88° 36' 41.501" E	27° 9' 17.063" N	27.49	127008.13	8°22'55"(R)	1461.681
2169	TP2155	659706.959	3004608.376	88° 36' 42.448" E	27° 9' 17.345" N	57.20	127035.62	13°9'51"(L)	1459.086
2170	TP2156	659755.306	3004638.952	88° 36' 44.218" E	27° 9' 18.319" N	30.05	127092.82	13°19'31"(L)	1452.959
2171	TP2157	659776.320	3004660.437	88° 36' 44.992" E	27° 9' 19.008" N	49.61	127122.88	20°44'56"(L)	1450.345
2172	TP2158	659796.194	3004705.892	88° 36' 45.735" E	27° 9' 20.476" N	13.86	127172.49	14°33'28"(L)	1444.049
2173	TP2159	659798.375	3004719.574	88° 36' 45.820" E	27° 9' 20.920" N	37.50	127186.34	8°53'32"(L)	1442.217
2174	TP2160	659798.484	3004757.069	88° 36' 45.842" E	27° 9' 22.138" N	45.47	127223.84	58°23'32"(R)	1438.900
2175	TP2161	659837.273	3004780.785	88° 36' 47.262" E	27° 9' 22.892" N	24.16	127269.30	24°1'26"(L)	1436.134
2176	TP2162	659850.969	3004800.687	88° 36' 47.768" E	27° 9' 23.533" N	13.79	127293.46	18°5'38"(L)	1434.125
2177	TP2163	659854.873	3004813.917	88° 36' 47.916" E	27° 9' 23.962" N	51.27	127307.25	27°6'58"(L)	1434.488
2178	TP2164	659845.375	3004864.302	88° 36' 47.595" E	27° 9' 25.602" N	31.03	127358.53	30°26'8"(R)	1430.721

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
2179	TP2165	659855.865	3004893.503	88° 36' 47.989" E	27° 9' 26.547" N	29.42	127389.56	14°33'47"(R)	1428.479
2180	TP2166	659872.453	3004917.799	88° 36' 48.603" E	27° 9' 27.329" N	32.40	127418.97	11°42'18"(R)	1426.801
2181	TP2167	659895.768	3004940.292	88° 36' 49.461" E	27° 9' 28.050" N	58.35	127451.37	29°18'10"(L)	1425.104
2182	TP2168	659912.560	3004996.174	88° 36' 50.097" E	27° 9' 29.859" N	38.61	127509.72	38°20'51"(R)	1422.181
2183	TP2169	659944.214	3005018.278	88° 36' 51.257" E	27° 9' 30.564" N	28.22	127548.33	7°13'45"(R)	1419.882
2184	TP2170	659969.202	3005031.396	88° 36' 52.170" E	27° 9' 30.979" N	33.53	127576.55	14°13'31"(L)	1418.435
2185	TP2171	659994.151	3005053.800	88° 36' 53.087" E	27° 9' 31.697" N	35.57	127610.08	23°12'7"(L)	1416.641
2186	TP2172	660009.111	3005086.066	88° 36' 53.646" E	27° 9' 32.739" N	48.59	127645.65	13°33'7"(R)	1414.892
2187	TP2173	660039.312	3005124.134	88° 36' 54.760" E	27° 9' 33.963" N	71.00	127694.24	2°16'12"(R)	1412.745
2188	TP2174	660085.605	3005177.961	88° 36' 56.467" E	27° 9' 35.693" N	29.43	127765.24	22°28'9"(L)	1409.956
2189	TP2175	660094.812	3005205.919	88° 36' 56.814" E	27° 9' 36.597" N	32.82	127794.67	5°52'49"(L)	1408.472
2190	TP2176	660101.830	3005237.980	88° 36' 57.084" E	27° 9' 37.636" N	26.51	127827.49	9°49'13"(R)	1407.492
2191	TP2177	660111.834	3005262.534	88° 36' 57.459" E	27° 9' 38.429" N	16.98	127854.01	17°38'22"(R)	1407.453
2192	TP2178	660122.707	3005275.581	88° 36' 57.860" E	27° 9' 38.849" N	49.76	127870.99	12°10'32"(R)	1407.026
2193	TP2179	660161.910	3005306.229	88° 36' 59.298" E	27° 9' 39.828" N	30.60	127920.75	18°3'47"(L)	1404.384
2194	TP2180	660178.987	3005331.623	88° 36' 59.931" E	27° 9' 40.646" N	5.02	127951.35	88°52'8"(R)	1403.163
2195	TP2181	660183.097	3005328.740	88° 37' 0.079" E	27° 9' 40.550" N	12.61	127956.37	57°32'21"(L)	1401.306
2196	TP2182	660195.306	3005331.903	88° 37' 0.523" E	27° 9' 40.648" N	11.44	127968.99	74°39'12"(R)	1400.780
2197	TP2183	660201.004	3005321.983	88° 37' 0.726" E	27° 9' 40.323" N	22.74	127980.43	55°17'23"(R)	1399.939
2198	TP2184	660191.245	3005301.449	88° 37' 0.362" E	27° 9' 39.660" N	22.13	128003.16	14°39'40"(R)	1398.789
2199	TP2185	660176.994	3005284.513	88° 36' 59.836" E	27° 9' 39.116" N	30.17	128025.29	7°46'40"(R)	1397.527
2200	TP2186	660154.625	3005264.271	88° 36' 59.014" E	27° 9' 38.468" N	39.04	128055.46	10°47'58"(L)	1396.489
2201	TP2187	660131.099	3005233.117	88° 36' 58.145" E	27° 9' 37.466" N	66.78	128094.50	39°59'32"(L)	1395.155
2202	TP2188	660134.517	3005166.424	88° 36' 58.238" E	27° 9' 35.297" N	69.33	128161.28	13°55'21"(R)	1391.124
2203	TP2189	660121.301	3005098.365	88° 36' 57.726" E	27° 9' 33.092" N	56.76	128230.61	18°25'57"(R)	1387.314
2204	TP2190	660093.420	3005048.926	88° 36' 56.690" E	27° 9' 31.497" N	28.09	128287.37	62°20'32"(L)	1385.462
2205	TP2191	660106.951	3005024.315	88° 36' 57.170" E	27° 9' 30.692" N	5.52	128315.46	86°34'43"(L)	1383.912
2206	TP2192	660111.427	3005027.550	88° 36' 57.334" E	27° 9' 30.795" N	14.69	128320.98	0°0'20"(L)	1383.559
2207	TP2193	660123.013	3005036.587	88° 36' 57.759" E	27° 9' 31.084" N	40.28	128335.67	40°32'36"(L)	1382.620
2208	TP2194	660131.046	3005076.061	88° 36' 58.070" E	27° 9' 32.363" N	33.48	128375.96	27°52'56"(R)	1379.943
2209	TP2195	660152.287	3005101.934	88° 36' 58.853" E	27° 9' 33.195" N	29.91	128409.43	27°24'7"(L)	1378.185
2210	TP2196	660158.498	3005131.197	88° 36' 59.093" E	27° 9' 34.143" N	72.46	128439.35	4°26'51"(R)	1376.001
2211	TP2197	660178.994	3005200.699	88° 36' 59.870" E	27° 9' 36.392" N	33.67	128511.81	39°14'11"(R)	1372.520
2212	TP2198	660206.795	3005219.687	88° 37' 0.888" E	27° 9' 36.998" N	57.79	128545.47	20°6'37"(R)	1370.926
2213	TP2199	660262.813	3005233.885	88° 37' 2.930" E	27° 9' 37.435" N	46.38	128603.26	40°34'43"(L)	1367.998
2214	TP2200	660289.545	3005271.782	88° 37' 3.918" E	27° 9' 38.655" N	40.31	128649.64	23°50'10"(L)	1365.005
2215	TP2201	660297.486	3005311.298	88° 37' 4.225" E	27° 9' 39.936" N	33.29	128689.95	25°59'20"(R)	1362.991
2216	TP2202	660317.683	3005337.761	88° 37' 4.971" E	27° 9' 40.787" N	40.10	128723.24	4°25'45"(R)	1361.654
2217	TP2203	660344.404	3005367.667	88° 37' 5.956" E	27° 9' 41.748" N	51.30	128763.34	11°34'15"(L)	1359.530
2218	TP2204	660370.215	3005411.997	88° 37' 6.914" E	27° 9' 43.177" N	34.72	128814.64	20°53'15"(R)	1356.720
2219	TP2205	660397.237	3005433.803	88° 37' 7.906" E	27° 9' 43.874" N	73.13	128849.36	6°6'42"(R)	1355.271
2220	TP2206	660458.714	3005473.409	88° 37' 10.157" E	27° 9' 45.135" N	58.14	128922.49	15°18'23"(L)	1354.159
2221	TP2207	660497.543	3005516.680	88° 37' 11.588" E	27° 9' 46.525" N	4.01	128980.63	88°51'28"(R)	1350.096
2222	TP2208	660500.583	3005514.060	88° 37' 11.697" E	27° 9' 46.438" N	15.85	128984.64	1°44'40"(R)	1347.918
2223	TP2209	660512.269	3005503.350	88° 37' 12.117" E	27° 9' 46.085" N	34.99	129000.49	82°43'32"(R)	1346.012
2224	TP2210	660492.084	3005474.768	88° 37' 11.370" E	27° 9' 45.165" N	64.94	129035.48	12°17'34"(R)	1344.493
2225	TP2211	660444.187	3005430.914	88° 37' 9.610" E	27° 9' 43.761" N	26.50	129100.43	13°23'25"(R)	1341.092
2226	TP2212	660421.028	3005418.031	88° 37' 8.763" E	27° 9' 43.352" N	35.80	129126.93	31°42'0"(L)	1339.663
2227	TP2213	660403.555	3005386.784	88° 37' 8.113" E	27° 9' 42.344" N	60.86	129162.73	7°3'8"(L)	1337.600
2228	TP2214	660380.596	3005330.416	88° 37' 7.253" E	27° 9' 40.522" N	31.01	129223.59	28°29'58"(L)	1334.878
2229	TP2215	660384.019	3005299.599	88° 37' 7.363" E	27° 9' 39.520" N	32.26	129254.60	11°1'5"(R)	1333.343
2230	TP2216	660381.387	3005267.448	88° 37' 7.252" E	27° 9' 38.476" N	27.71	129286.86	4°47'37"(L)	1331.567
2231	TP2217	660381.442	3005239.740	88° 37' 7.241" E	27° 9' 37.576" N	26.27	129314.56	13°16'11"(L)	1330.139
2232	TP2218	660387.522	3005214.186	88° 37' 7.450" E	27° 9' 36.743" N	38.57	129340.83	19°49'55"(R)	1328.877
2233	TP2219	660383.190	3005175.859	88° 37' 7.275" E	27° 9' 35.500" N	71.18	129379.40	8°16'12"(R)	1326.789
2234	TP2220	660365.104	3005107.011	88° 37' 6.586" E	27° 9' 33.270" N	25.90	129450.59	83°54'12"(L)	1323.993
2235	TP2221	660390.832	3005104.009	88° 37' 7.519" E	27° 9' 33.162" N	26.40	129476.49	88°54'45"(L)	1321.535
2236	TP2222	660394.389	3005130.166	88° 37' 7.660" E	27° 9' 34.010" N	83.69	129502.89	7°23'3"(R)	1319.120
2237	TP2223	660416.229	3005210.960	88° 37' 8.491" E	27° 9' 36.626" N	39.05	129586.58	12°42'55"(L)	1315.995
2238	TP2224	660417.872	3005249.976	88° 37' 8.569" E	27° 9' 37.893" N	97.17	129625.63	14°29'11"(R)	1313.839
2239	TP2225	660446.115	3005342.948	88° 37' 9.639" E	27° 9' 40.902" N	54.03	129722.80	43°49'33"(R)	1308.067
2240	TP2226	660493.244	3005369.370	88° 37' 11.363" E	27° 9' 41.741" N	69.59	129776.83	7°1'20"(R)	1304.742
2241	TP2227	660557.651	3005395.725	88° 37' 13.715" E	27° 9' 42.570" N	43.80	129846.42	11°3'53"(L)	1301.069
2242	TP2228	660594.254	3005419.786	88° 37' 15.055" E	27° 9' 43.336" N	48.57	129890.22	25°7'48"(L)	1299.648
2243	TP2229	660619.666	3005461.172	88° 37' 15.998" E	27° 9' 44.670" N	28.65	129938.79	83°0'32"(R)	1298.446
2244	TP2230	660645.725	3005449.263	88° 37' 16.939" E	27° 9' 44.272" N	34.91	129967.44	83°44'3"(R)	1296.952

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
2245	TP2231	660634.767	3005416.119	88° 37' 16.525" E	27° 9' 43.200" N	54.20	130002.35	26°15'52"(R)	1295.372
2246	TP2232	660596.738	3005377.499	88° 37' 15.126" E	27° 9' 41.961" N	98.99	130056.55	26°15'52"(R)	1293.546
2247	TP2233	660512.802	3005325.019	88° 37' 12.052" E	27° 9' 40.291" N	16.93	130155.54	37°12'0"(L)	1291.019
2248	TP2234	660506.793	3005309.187	88° 37' 11.827" E	27° 9' 39.780" N	29.66	130172.47	54°5'41"(L)	1289.369
2249	TP2235	660523.082	3005284.399	88° 37' 12.407" E	27° 9' 38.967" N	23.27	130202.14	49°39'22"(L)	1286.287
2250	TP2236	660546.174	3005281.549	88° 37' 13.244" E	27° 9' 38.865" N	26.86	130225.40	15°22'43"(L)	1285.104
2251	TP2237	660572.748	3005285.447	88° 37' 14.211" E	27° 9' 38.981" N	36.51	130252.26	25°45'23"(L)	1283.161
2252	TP2238	660602.978	3005305.915	88° 37' 15.319" E	27° 9' 39.633" N	30.45	130288.77	19°44'45"(L)	1281.659
2253	TP2239	660620.943	3005330.503	88° 37' 15.983" E	27° 9' 40.424" N	48.90	130319.22	10°27'45"(L)	1280.487
2254	TP2240	660642.143	3005374.571	88° 37' 16.774" E	27° 9' 41.847" N	45.83	130368.12	4°6'54"(R)	1278.032
2255	TP2241	660664.925	3005414.341	88° 37' 17.620" E	27° 9' 43.130" N	56.85	130413.96	10°28'19"(R)	1275.988
2256	TP2242	660701.680	3005457.715	88° 37' 18.975" E	27° 9' 44.523" N	68.38	130470.81	46°13'54"(L)	1271.595
2257	TP2243	660694.587	3005525.730	88° 37' 18.749" E	27° 9' 46.736" N	14.12	130539.19	89°52'31"(R)	1267.074
2258	TP2244	660708.631	3005527.225	88° 37' 19.260" E	27° 9' 46.779" N	12.91	130553.32	66°4'3"(R)	1264.063
2259	TP2245	660714.099	3005515.531	88° 37' 19.453" E	27° 9' 46.397" N	43.48	130566.22	18°44'39"(R)	1261.839
2260	TP2246	660718.882	3005472.319	88° 37' 19.607" E	27° 9' 44.991" N	46.65	130609.70	22°36'18"(L)	1259.758
2261	TP2247	660741.444	3005431.484	88° 37' 20.407" E	27° 9' 43.654" N	9.16	130656.35	27°20'39"(R)	1256.375
2262	TP2248	660741.696	3005422.332	88° 37' 20.412" E	27° 9' 43.357" N	63.39	130665.51	34°3'32"(R)	1256.183
2263	TP2249	660707.652	3005368.856	88° 37' 19.150" E	27° 9' 41.634" N	26.42	130728.90	7°37'19"(L)	1253.627
2264	TP2250	660696.544	3005344.882	88° 37' 18.736" E	27° 9' 40.860" N	35.13	130755.33	18°55'11"(L)	1252.395
2265	TP2251	660692.908	3005309.940	88° 37' 18.587" E	27° 9' 39.726" N	53.64	130790.46	12°48'2"(R)	1251.414
2266	TP2252	660675.674	3005259.142	88° 37' 17.937" E	27° 9' 38.083" N	16.65	130844.10	34°10'31"(L)	1248.252
2267	TP2253	660680.105	3005243.094	88° 37' 18.091" E	27° 9' 37.560" N	11.01	130860.75	84°32'35"(L)	1246.986
2268	TP2254	660690.951	3005245.002	88° 37' 18.486" E	27° 9' 37.617" N	69.45	130871.76	56°16'58"(L)	1245.107
2269	TP2255	660709.708	3005311.875	88° 37' 19.198" E	27° 9' 39.782" N	26.80	130941.21	31°51'53"(R)	1241.222
2270	TP2256	660729.475	3005329.967	88° 37' 19.925" E	27° 9' 40.361" N	5.92	130968.01	85°10'14"(R)	1240.528
2271	TP2257	660733.827	3005325.950	88° 37' 20.081" E	27° 9' 40.229" N	31.02	130973.93	81°14'51"(L)	1239.072
2272	TP2258	660763.414	3005335.281	88° 37' 21.160" E	27° 9' 40.520" N	18.97	131004.95	31°55'57"(R)	1236.556
2273	TP2259	660781.786	3005330.553	88° 37' 21.825" E	27° 9' 40.358" N	12.74	131023.93	87°59'54"(R)	1235.893
2274	TP2260	660779.044	3005318.110	88° 37' 21.720" E	27° 9' 39.955" N	45.66	131036.67	63°58'0"(R)	1234.293
2275	TP2261	660734.664	3005307.369	88° 37' 20.103" E	27° 9' 39.625" N	22.07	131082.33	38°31'57"(L)	1233.374
2276	TP2262	660721.118	3005289.944	88° 37' 19.602" E	27° 9' 39.064" N	32.58	131104.40	41°59'28"(L)	1232.512
2277	TP2263	660723.464	3005257.446	88° 37' 19.672" E	27° 9' 38.008" N	25.10	131136.98	5°32'8"(L)	1231.453
2278	TP2264	660727.677	3005232.707	88° 37' 19.814" E	27° 9' 37.202" N	81.56	131162.08	16°53'0"(R)	1229.043
2279	TP2265	660717.428	3005151.790	88° 37' 19.403" E	27° 9' 34.578" N	53.56	131243.64	22°31'23"(R)	1226.126
2280	TP2266	660690.856	3005105.283	88° 37' 18.417" E	27° 9' 33.078" N	3.02	131297.20	80°47'7"(L)	1224.215
2281	TP2267	660693.207	3005103.382	88° 37' 18.501" E	27° 9' 33.015" N	42.84	131300.23	82°25'40"(R)	1223.524
2282	TP2268	660670.895	3005066.805	88° 37' 17.673" E	27° 9' 31.836" N	16.91	131343.07	82°49'37"(L)	1222.057
2283	TP2269	660684.120	3005056.264	88° 37' 18.149" E	27° 9' 31.488" N	12.90	131359.98	80°6'5"(L)	1219.685
2284	TP2270	660693.778	3005064.822	88° 37' 18.504" E	27° 9' 31.762" N	17.38	131372.89	34°18'44"(L)	1219.046
2285	TP2271	660698.024	3005081.672	88° 37' 18.666" E	27° 9' 32.308" N	16.33	131390.27	21°3'41"(R)	1218.505
2286	TP2272	660707.436	3005095.012	88° 37' 19.014" E	27° 9' 32.737" N	20.95	131406.59	23°51'6"(R)	1217.589
2287	TP2273	660725.402	3005105.783	88° 37' 19.672" E	27° 9' 33.079" N	19.33	131427.54	22°8'53"(L)	1215.244
2288	TP2274	660737.011	3005121.240	88° 37' 20.100" E	27° 9' 33.577" N	14.92	131446.87	17°30'55"(L)	1214.312
2289	TP2275	660741.965	3005135.313	88° 37' 20.287" E	27° 9' 34.032" N	34.25	131461.79	8°25'23"(L)	1214.001
2290	TP2276	660748.483	3005168.939	88° 37' 20.540" E	27° 9' 35.122" N	29.23	131496.04	13°41'48"(R)	1212.409
2291	TP2277	660760.682	3005195.502	88° 37' 20.995" E	27° 9' 35.980" N	26.25	131525.27	14°22'48"(L)	1209.930
2292	TP2278	660765.370	3005221.332	88° 37' 21.177" E	27° 9' 36.817" N	17.90	131551.52	2°28'25"(R)	1207.899
2293	TP2279	660769.323	3005238.787	88° 37' 21.329" E	27° 9' 37.382" N	33.00	131569.42	25°32'15"(R)	1206.350
2294	TP2280	660789.776	3005264.687	88° 37' 22.084" E	27° 9' 38.215" N	47.47	131602.42	25°32'15"(R)	1205.504
2295	TP2281	660828.064	3005292.746	88° 37' 23.488" E	27° 9' 39.111" N	26.59	131649.89	27°3'4"(R)	1202.813
2296	TP2282	660854.316	3005296.991	88° 37' 24.444" E	27° 9' 39.237" N	21.63	131676.48	4°10'46"(R)	1201.122
2297	TP2283	660875.865	3005298.878	88° 37' 25.227" E	27° 9' 39.290" N	16.01	131698.11	23°8'4"(L)	1199.990
2298	TP2284	660889.985	3005306.430	88° 37' 25.744" E	27° 9' 39.529" N	22.12	131714.13	33°30'17"(L)	1198.669
2299	TP2285	660900.493	3005325.900	88° 37' 26.135" E	27° 9' 40.157" N	30.41	131736.25	20°23'24"(L)	1197.001
2300	TP2286	660904.707	3005356.014	88° 37' 26.302" E	27° 9' 41.134" N	32.54	131766.66	36°40'49"(L)	1194.440
2301	TP2287	660889.075	3005384.549	88° 37' 25.747" E	27° 9' 42.068" N	5.60	131799.20	83°38'6"(R)	1192.582
2302	TP2288	660893.656	3005387.766	88° 37' 25.915" E	27° 9' 42.170" N	7.98	131804.79	2°4'46"(L)	1191.507
2303	TP2289	660900.558	3005391.772	88° 37' 26.168" E	27° 9' 42.297" N	7.43	131812.77	70°16'39"(R)	1190.576
2304	TP2290	660906.237	3005386.982	88° 37' 26.372" E	27° 9' 42.139" N	15.70	131820.20	19°22'16"(R)	1189.345
2305	TP2291	660914.203	3005373.449	88° 37' 26.655" E	27° 9' 41.696" N	25.15	131835.91	18°25'45"(R)	1188.989
2306	TP2292	660919.455	3005348.853	88° 37' 26.834" E	27° 9' 40.895" N	18.78	131861.06	13°8'54"(R)	1187.369
2307	TP2293	660919.096	3005330.072	88° 37' 26.812" E	27° 9' 40.285" N	24.13	131879.84	14°55'44"(R)	1187.128
2308	TP2294	660912.435	3005306.879	88° 37' 26.559" E	27° 9' 39.534" N	16.44	131903.97	11°57'8"(R)	1185.323
2309	TP2295	660904.725	3005292.364	88° 37' 26.272" E	27° 9' 39.066" N	34.58	131920.41	21°26'23"(R)	1184.887
2310	TP2296	660878.466	3005269.870	88° 37' 25.308" E	27° 9' 38.346" N	26.14	131954.98	15°53'59"(L)	1183.613

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
2311	TP2297	660864.032	3005248.076	88° 37' 24.774" E	27° 9' 37.644" N	15.75	131981.12	9°39'58"(L)	1182.216
2312	TP2298	660857.664	3005233.672	88° 37' 24.536" E	27° 9' 37.179" N	50.31	131996.87	20°0'54"(L)	1181.910
2313	TP2299	660854.299	3005183.474	88° 37' 24.390" E	27° 9' 35.549" N	5.20	132047.18	79°25'1"(L)	1181.121
2314	TP2300	660859.332	3005182.180	88° 37' 24.572" E	27° 9' 35.505" N	18.88	132052.38	67°57'17"(R)	1180.984
2315	TP2301	660861.838	3005163.467	88° 37' 24.654" E	27° 9' 34.896" N	14.92	132071.26	78°0'23"(L)	1179.942
2316	TP2302	660876.715	3005162.331	88° 37' 25.194" E	27° 9' 34.853" N	16.73	132086.18	76°45'41"(L)	1177.930
2317	TP2303	660881.774	3005178.274	88° 37' 25.385" E	27° 9' 35.369" N	28.87	132102.91	22°21'22"(L)	1177.329
2318	TP2304	660879.383	3005207.043	88° 37' 25.312" E	27° 9' 36.305" N	25.06	132131.78	6°47'33"(R)	1176.019
2319	TP2305	660880.276	3005232.084	88° 37' 25.356" E	27° 9' 37.118" N	45.06	132156.83	33°43'49"(R)	1175.218
2320	TP2306	660906.617	3005268.645	88° 37' 26.330" E	27° 9' 38.295" N	38.44	132201.89	15°30'13"(R)	1172.396
2321	TP2307	660936.610	3005292.695	88° 37' 27.431" E	27° 9' 39.063" N	29.39	132240.34	15°27'17"(R)	1171.321
2322	TP2308	660963.612	3005304.307	88° 37' 28.417" E	27° 9' 39.429" N	19.41	132269.73	6°20'54"(R)	1170.297
2323	TP2309	660982.184	3005309.957	88° 37' 29.094" E	27° 9' 39.605" N	30.98	132289.14	40°45'35"(L)	1168.684
2324	TP2310	660998.748	3005336.141	88° 37' 29.708" E	27° 9' 40.449" N	6.59	132320.13	67°56'26"(R)	1166.982
2325	TP2311	661005.233	3005334.967	88° 37' 29.943" E	27° 9' 40.408" N	13.49	132326.72	37°28'39"(R)	1165.710
2326	TP2312	661014.305	3005324.984	88° 37' 30.268" E	27° 9' 40.080" N	28.58	132340.21	74°34'4"(R)	1164.374
2327	TP2313	660999.030	3005300.826	88° 37' 29.702" E	27° 9' 39.301" N	24.84	132368.79	31°57'45"(R)	1163.861
2328	TP2314	660976.655	3005290.042	88° 37' 28.884" E	27° 9' 38.960" N	42.22	132393.63	19°6'28"(L)	1162.785
2329	TP2315	660946.715	3005260.268	88° 37' 27.783" E	27° 9' 38.006" N	34.92	132435.85	42°36'24"(L)	1161.237
2330	TP2316	660945.159	3005225.378	88° 37' 27.710" E	27° 9' 36.873" N	40.40	132470.78	38°31'20"(L)	1157.889
2331	TP2317	660968.890	3005192.678	88° 37' 28.556" E	27° 9' 35.800" N	19.67	132511.18	21°21'40"(L)	1158.016
2332	TP2318	660985.448	3005182.060	88° 37' 29.153" E	27° 9' 35.448" N	19.55	132530.85	74°46'58"(L)	1156.784
2333	TP2319	660999.948	3005195.168	88° 37' 29.685" E	27° 9' 35.868" N	34.60	132550.40	67°58'41"(L)	1155.293
2334	TP2320	660988.063	3005227.661	88° 37' 29.269" E	27° 9' 36.929" N	39.07	132584.99	29°16'13"(R)	1151.565
2335	TP2321	660994.295	3005266.227	88° 37' 29.514" E	27° 9' 38.179" N	45.05	132624.06	40°37'25"(R)	1153.077
2336	TP2322	661028.707	3005295.305	88° 37' 30.777" E	27° 9' 39.109" N	32.87	132669.11	84°54'6"(R)	1149.910
2337	TP2323	661052.072	3005272.180	88° 37' 31.615" E	27° 9' 38.348" N	27.88	132701.99	83°6'16"(R)	1146.153
2338	TP2324	661034.980	3005250.152	88° 37' 30.984" E	27° 9' 37.640" N	21.30	132729.87	5°55'16"(L)	1142.759
2339	TP2325	661023.730	3005232.069	88° 37' 30.567" E	27° 9' 37.057" N	11.09	132751.17	17°45'59"(L)	1141.895
2340	TP2326	661021.025	3005221.318	88° 37' 30.463" E	27° 9' 36.709" N	41.31	132762.25	49°14'10"(L)	1141.737
2341	TP2327	661044.789	3005187.524	88° 37' 31.311" E	27° 9' 35.601" N	35.56	132803.56	22°47'28"(R)	1139.129
2342	TP2328	661052.378	3005152.787	88° 37' 31.570" E	27° 9' 34.469" N	35.27	132839.12	51°22'33"(R)	1137.310
2343	TP2329	661030.156	3005125.396	88° 37' 30.750" E	27° 9' 33.589" N	41.14	132874.39	25°53'1"(R)	1135.474
2344	TP2330	660992.891	3005107.968	88° 37' 29.388" E	27° 9' 33.038" N	57.64	132915.53	17°8'28"(L)	1133.742
2345	TP2331	660950.198	3005069.249	88° 37' 27.819" E	27° 9' 31.798" N	12.08	132973.17	47°37'50"(L)	1130.710
2346	TP2332	660950.163	3005057.173	88° 37' 27.812" E	27° 9' 31.406" N	48.28	132985.24	22°7'23"(L)	1130.817
2347	TP2333	660968.219	3005012.391	88° 37' 28.447" E	27° 9' 29.943" N	46.81	133033.53	23°14'44"(R)	1128.593
2348	TP2334	660967.168	3004965.594	88° 37' 28.387" E	27° 9' 28.423" N	20.42	133080.34	6°20'3"(L)	1127.107
2349	TP2335	660968.965	3004945.252	88° 37' 28.443" E	27° 9' 27.762" N	15.00	133100.76	86°53'9"(L)	1127.375
2350	TP2336	660983.959	3004945.758	88° 37' 28.987" E	27° 9' 27.772" N	78.57	133115.76	76°48'59"(L)	1124.999
2351	TP2337	660999.288	3005022.821	88° 37' 29.580" E	27° 9' 30.269" N	39.86	133194.33	8°10'0"(L)	1120.446
2352	TP2338	661001.432	3005062.621	88° 37' 29.677" E	27° 9' 31.561" N	7.54	133234.19	14°32'4"(R)	1119.058
2353	TP2339	661003.714	3005069.807	88° 37' 29.763" E	27° 9' 31.794" N	2.72	133241.73	14°48'10"(R)	1119.158
2354	TP2340	661005.172	3005072.103	88° 37' 29.817" E	27° 9' 31.868" N	28.79	133244.45	38°48'7"(R)	1119.009
2355	TP2341	661032.432	3005081.371	88° 37' 30.812" E	27° 9' 32.157" N	40.93	133273.24	8°1'3"(R)	1117.998
2356	TP2342	661072.646	3005089.013	88° 37' 32.276" E	27° 9' 32.389" N	27.64	133314.18	11°24'33"(L)	1116.384
2357	TP2343	661098.241	3005099.442	88° 37' 33.211" E	27° 9' 32.717" N	26.16	133341.82	51°15'56"(L)	1114.124
2358	TP2344	661105.700	3005124.518	88° 37' 33.493" E	27° 9' 33.528" N	40.98	133367.98	11°21'24"(L)	1112.714
2359	TP2345	661109.420	3005165.326	88° 37' 33.648" E	27° 9' 34.852" N	50.20	133408.95	0°21'26"(R)	1110.713
2360	TP2346	661114.289	3005215.290	88° 37' 33.848" E	27° 9' 36.474" N	112.66	133459.16	50°26'20"(R)	1108.241
2361	TP2347	661207.695	3005278.282	88° 37' 37.270" E	27° 9' 38.481" N	53.14	133571.82	2°30'12"(R)	1098.289
2362	TP2348	661253.004	3005306.039	88° 37' 38.929" E	27° 9' 39.364" N	5.20	133624.95	85°28'59"(R)	1094.581
2363	TP2349	661256.060	3005301.835	88° 37' 39.038" E	27° 9' 39.226" N	6.67	133630.15	32°28'40"(L)	1092.283
2364	TP2350	661260.688	3005297.026	88° 37' 39.204" E	27° 9' 39.068" N	59.27	133636.82	86°52'42"(R)	1090.539
2365	TP2351	661220.285	3005253.666	88° 37' 37.716" E	27° 9' 37.676" N	40.00	133696.09	12°28'1"(L)	1088.932
2366	TP2352	661199.975	3005219.202	88° 37' 36.962" E	27° 9' 36.565" N	31.39	133736.09	27°7'52"(R)	1087.802
2367	TP2353	661173.456	3005202.400	88° 37' 35.991" E	27° 9' 36.030" N	68.72	133767.49	56°32'39"(L)	1087.152
2368	TP2354	661172.139	3005133.695	88° 37' 35.911" E	27° 9' 33.798" N	36.94	133836.20	24°15'31"(R)	1084.945
2369	TP2355	661156.319	3005100.312	88° 37' 35.320" E	27° 9' 32.720" N	7.89	133873.15	89°37'38"(L)	1083.841
2370	TP2356	661163.425	3005096.888	88° 37' 35.577" E	27° 9' 32.606" N	10.18	133881.04	35°58'16"(R)	1081.881
2371	TP2357	661169.594	3005088.795	88° 37' 35.797" E	27° 9' 32.341" N	20.53	133891.21	84°15'3"(L)	1079.854
2372	TP2358	661187.086	3005099.543	88° 37' 36.438" E	27° 9' 32.683" N	80.28	133911.74	35°22'1"(L)	1074.216
2373	TP2359	661218.538	3005173.405	88° 37' 37.615" E	27° 9' 35.069" N	39.07	133992.02	22°13'53"(R)	1073.005
2374	TP2360	661246.306	3005200.887	88° 37' 38.636" E	27° 9' 35.950" N	37.13	134031.09	2°8'54"(R)	1069.346
2375	TP2361	661273.655	3005225.996	88° 37' 39.641" E	27° 9' 36.754" N	39.72	134068.22	8°7'3"(R)	1067.535
2376	TP2362	661306.417	3005248.460	88° 37' 40.842" E	27° 9' 37.470" N	39.93	134107.94	25°53'47"(R)	1066.299

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
2377	TP2363	661345.909	3005254.391	88° 37' 42.279" E	27° 9' 37.646" N	16.68	134147.87	18°20'59"(L)	1063.397
2378	TP2364	661360.789	3005261.937	88° 37' 42.823" E	27° 9' 37.885" N	24.66	134164.56	72°33'55"(L)	1061.926
2379	TP2365	661356.738	3005286.260	88° 37' 42.688" E	27° 9' 38.677" N	44.28	134189.22	23°25'38"(R)	1059.752
2380	TP2366	661367.429	3005329.231	88° 37' 43.096" E	27° 9' 40.069" N	33.53	134233.50	10°1'22"(R)	1055.365
2381	TP2367	661381.063	3005359.862	88° 37' 43.606" E	27° 9' 41.058" N	45.88	134267.03	82°9'5"(L)	1052.452
2382	TP2368	661342.089	3005384.067	88° 37' 42.202" E	27° 9' 41.861" N	39.48	134312.90	43°43'13"(L)	1049.862
2383	TP2369	661303.454	3005375.941	88° 37' 40.794" E	27° 9' 41.613" N	88.26	134352.38	13°39'13"(R)	1047.567
2384	TP2370	661215.239	3005378.676	88° 37' 37.592" E	27° 9' 41.739" N	11.56	134440.64	17°38'18"(R)	1043.627
2385	TP2371	661204.332	3005382.520	88° 37' 37.197" E	27° 9' 41.869" N	61.17	134452.21	10°54'49"(R)	1043.043
2386	TP2372	661151.534	3005413.407	88° 37' 35.294" E	27° 9' 42.895" N	52.20	134513.38	32°59'4"(R)	1040.704
2387	TP2373	661128.091	3005460.043	88° 37' 34.465" E	27° 9' 44.420" N	33.92	134565.57	15°45'59"(R)	1038.520
2388	TP2374	661121.664	3005493.349	88° 37' 34.247" E	27° 9' 45.504" N	21.56	134599.49	15°45'59"(R)	1036.253
2389	TP2375	661124.671	3005514.704	88° 37' 34.366" E	27° 9' 46.197" N	48.79	134621.06	18°41'42"(L)	1035.104
2390	TP2376	661115.627	3005562.652	88° 37' 34.060" E	27° 9' 47.759" N	36.59	134669.85	28°26'7"(L)	1032.692
2391	TP2377	661092.545	3005591.037	88° 37' 33.235" E	27° 9' 48.691" N	32.21	134706.44	15°49'7"(L)	1030.017
2392	TP2378	661066.185	3005609.539	88° 37' 32.286" E	27° 9' 49.303" N	24.46	134738.64	15°49'7"(L)	1028.188
2393	TP2379	661042.904	3005617.049	88° 37' 31.444" E	27° 9' 49.557" N	33.39	134763.10	13°32'51"(R)	1026.322
2394	TP2380	661014.408	3005634.461	88° 37' 30.417" E	27° 9' 50.134" N	56.42	134796.50	20°20'29"(R)	1025.027
2395	TP2381	660979.492	3005678.780	88° 37' 29.170" E	27° 9' 51.589" N	58.77	134852.92	4°38'3"(R)	1021.015
2396	TP2382	660946.968	3005727.736	88° 37' 28.012" E	27° 9' 53.193" N	98.16	134911.69	12°21'41"(R)	1017.660
2397	TP2383	660911.411	3005819.233	88° 37' 26.763" E	27° 9' 56.181" N	23.90	135009.86	41°27'3"(L)	1010.947
2398	TP2384	660890.174	3005830.200	88° 37' 25.997" E	27° 9' 56.546" N	49.05	135033.76	11°3'11"(R)	1009.686
2399	TP2385	660851.713	3005860.646	88° 37' 24.614" E	27° 9' 57.551" N	67.39	135082.81	36°31'12"(R)	1006.375
2400	TP2386	660834.140	3005925.708	88° 37' 24.006" E	27° 9' 59.672" N	59.38	135150.21	22°42'46"(R)	1002.304
2401	TP2387	660841.991	3005984.563	88° 37' 24.319" E	27° 10' 1.581" N	35.45	135209.58	24°5'1"(L)	999.882
2402	TP2388	660831.932	3006018.553	88° 37' 23.970" E	27° 10' 2.690" N	60.16	135245.03	10°39'56"(R)	997.536
2403	TP2389	660825.832	3006078.399	88° 37' 23.776" E	27° 10' 4.637" N	25.28	135305.19	15°3'42"(L)	993.321
2404	TP2390	660816.823	3006102.014	88° 37' 23.460" E	27° 10' 5.408" N	53.18	135330.46	39°11'13"(R)	991.965
2405	TP2391	660833.525	3006152.501	88° 37' 24.091" E	27° 10' 7.041" N	160.65	135383.64	17°28'25"(R)	987.985
2406	TP2392	660927.454	3006282.836	88° 37' 27.564" E	27° 10' 11.236" N	17.17	135544.29	15°27'8"(L)	977.928
2407	TP2393	660933.419	3006298.939	88° 37' 27.788" E	27° 10' 11.757" N	53.62	135561.46	7°16'2"(R)	977.207
2408	TP2394	660958.239	3006346.466	88° 37' 28.712" E	27° 10' 13.290" N	17.64	135615.08	85°7'51"(R)	976.659
2409	TP2395	660973.122	3006336.998	88° 37' 29.248" E	27° 10' 12.976" N	11.27	135632.72	49°27'53"(R)	972.581
2410	TP2396	660975.406	3006325.965	88° 37' 29.326" E	27° 10' 12.617" N	56.54	135643.99	31°17'36"(R)	977.418
2411	TP2397	660956.441	3006272.699	88° 37' 28.612" E	27° 10' 10.894" N	37.19	135700.53	13°38'46"(R)	974.152
2412	TP2398	660936.052	3006241.593	88° 37' 27.857" E	27° 10' 9.892" N	57.79	135737.72	8°18'11"(L)	972.017
2413	TP2399	660911.684	3006189.196	88° 37' 26.947" E	27° 10' 8.200" N	52.83	135795.51	8°32'40"(L)	968.627
2414	TP2400	660896.771	3006138.515	88° 37' 26.381" E	27° 10' 6.560" N	21.12	135848.34	11°0'9"(L)	965.526
2415	TP2401	660894.786	3006117.493	88° 37' 26.299" E	27° 10' 5.878" N	34.27	135869.46	22°59'28"(L)	965.307
2416	TP2402	660905.146	3006084.828	88° 37' 26.660" E	27° 10' 4.812" N	81.28	135903.72	8°18'56"(R)	963.291
2417	TP2403	660918.255	3006004.613	88° 37' 27.099" E	27° 10' 2.201" N	51.69	135985.00	5°43'24"(R)	958.188
2418	TP2404	660921.463	3005953.021	88° 37' 27.191" E	27° 10' 0.523" N	32.26	136036.69	33°25'9"(L)	956.204
2419	TP2405	660940.866	3005927.251	88° 37' 27.884" E	27° 9' 59.678" N	33.08	136068.95	12°47'36"(L)	955.021
2420	TP2406	660966.124	3005905.884	88° 37' 28.791" E	27° 9' 58.973" N	91.49	136102.04	3°38'25"(L)	951.686
2421	TP2407	661039.587	3005851.347	88° 37' 31.434" E	27° 9' 57.170" N	39.70	136193.53	5°19'1"(L)	946.001
2422	TP2408	661073.520	3005830.738	88° 37' 32.657" E	27° 9' 56.486" N	75.90	136233.23	29°36'5"(R)	943.172
2423	TP2409	661110.465	3005764.433	88° 37' 33.968" E	27° 9' 54.316" N	24.28	136309.13	32°55'11"(L)	941.146
2424	TP2410	661131.913	3005753.051	88° 37' 34.741" E	27° 9' 53.938" N	8.57	136333.42	85°27'48"(L)	939.546
2425	TP2411	661136.518	3005760.281	88° 37' 34.912" E	27° 9' 54.171" N	12.52	136341.99	48°41'27"(L)	938.452
2426	TP2412	661131.447	3005771.723	88° 37' 34.733" E	27° 9' 54.544" N	30.34	136354.50	13°17'17"(L)	934.862
2427	TP2413	661113.109	3005795.892	88° 37' 34.078" E	27° 9' 55.337" N	26.75	136384.84	32°39'43"(R)	934.298
2428	TP2414	661110.998	3005822.559	88° 37' 34.014" E	27° 9' 56.205" N	34.13	136411.59	28°9'40"(L)	932.751
2429	TP2415	661092.568	3005851.280	88° 37' 33.358" E	27° 9' 57.146" N	47.85	136445.72	12°4'45"(L)	931.775
2430	TP2416	661058.870	3005885.253	88° 37' 32.150" E	27° 9' 58.263" N	50.24	136493.57	15°51'1"(R)	928.801
2431	TP2417	661034.576	3005929.231	88° 37' 31.289" E	27° 9' 59.703" N	56.63	136543.81	12°55'33"(R)	925.247
2432	TP2418	661018.976	3005983.666	88° 37' 30.748" E	27° 10' 1.478" N	30.63	136600.44	19°54'3"(R)	920.462
2433	TP2419	661021.065	3006014.227	88° 37' 30.838" E	27° 10' 2.470" N	63.59	136631.07	8°59'14"(L)	918.410
2434	TP2420	661015.437	3006077.572	88° 37' 30.663" E	27° 10' 4.530" N	23.60	136694.66	17°43'55"(R)	915.500
2435	TP2421	661020.607	3006100.598	88° 37' 30.862" E	27° 10' 5.276" N	65.12	136718.26	10°56'32"(R)	914.405
2436	TP2422	661046.674	3006160.272	88° 37' 31.837" E	27° 10' 7.204" N	16.72	136783.38	88°11'34"(R)	910.385
2437	TP2423	661062.201	3006154.065	88° 37' 32.398" E	27° 10' 6.996" N	18.32	136800.10	8°46'4"(L)	907.670
2438	TP2424	661075.829	3006141.815	88° 37' 32.887" E	27° 10' 6.592" N	38.50	136818.43	86°30'45"(R)	905.812
2439	TP2425	661051.881	3006111.670	88° 37' 32.003" E	27° 10' 5.622" N	28.85	136856.93	43°59'31"(L)	903.599
2440	TP2426	661054.660	3006082.955	88° 37' 32.090" E	27° 10' 4.688" N	52.30	136885.77	39°0'49"(L)	902.172
2441	TP2427	661091.348	3006045.675	88° 37' 33.406" E	27° 10' 3.462" N	21.74	136938.08	19°50'12"(R)	898.409
2442	TP2428	661100.434	3006025.925	88° 37' 33.726" E	27° 10' 2.816" N	32.98	136959.82	23°6'16"(R)	896.688

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
2443	TP2429	661101.355	3005992.962	88° 37' 33.744" E	27° 10' 1.745" N	43.72	136992.80	0°40'59"(L)	894.737
2444	TP2430	661103.097	3005949.276	88° 37' 33.787" E	27° 10' 0.325" N	92.42	137036.52	42°26'49"(L)	891.962
2445	TP2431	661168.137	3005883.621	88° 37' 36.119" E	27° 9' 58.164" N	38.76	137128.93	9°5'0"(L)	886.199
2446	TP2432	661199.424	3005860.734	88° 37' 37.244" E	27° 9' 57.408" N	48.44	137167.70	12°57'46"(L)	884.251
2447	TP2433	661243.935	3005841.635	88° 37' 38.852" E	27° 9' 56.768" N	49.34	137216.13	13°14'11"(L)	880.951
2448	TP2434	661292.529	3005833.078	88° 37' 40.613" E	27° 9' 56.470" N	32.83	137265.47	8°45'30"(L)	878.895
2449	TP2435	661325.355	3005832.374	88° 37' 41.805" E	27° 9' 56.433" N	61.24	137298.31	17°29'13"(R)	876.910
2450	TP2436	661383.354	3005812.725	88° 37' 43.903" E	27° 9' 55.770" N	27.05	137359.54	10°5'28"(L)	873.870
2451	TP2437	661410.103	3005808.668	88° 37' 44.872" E	27° 9' 55.627" N	45.32	137386.60	35°11'28"(L)	872.350
2452	TP2438	661450.642	3005828.939	88° 37' 46.354" E	27° 9' 56.269" N	16.15	137431.92	48°51'58"(R)	868.696
2453	TP2439	661465.584	3005822.811	88° 37' 46.894" E	27° 9' 56.063" N	32.02	137448.07	27°41'0"(R)	867.432
2454	TP2440	661486.173	3005798.289	88° 37' 47.630" E	27° 9' 55.258" N	34.63	137480.09	17°48'10"(L)	866.425
2455	TP2441	661515.486	3005779.844	88° 37' 48.687" E	27° 9' 54.646" N	47.59	137514.73	20°57'51"(L)	865.300
2456	TP2442	661562.165	3005770.588	88° 37' 50.378" E	27° 9' 54.326" N	11.88	137562.31	12°46'43"(R)	863.462
2457	TP2443	661573.014	3005765.759	88° 37' 50.769" E	27° 9' 54.164" N	37.97	137574.19	53°38'14"(R)	862.327
2458	TP2444	661581.147	3005728.671	88° 37' 51.047" E	27° 9' 52.956" N	28.60	137612.16	9°57'18"(L)	860.570
2459	TP2445	661592.011	3005702.213	88° 37' 51.430" E	27° 9' 52.092" N	34.08	137640.76	7°13'26"(R)	859.511
2460	TP2446	661600.888	3005669.313	88° 37' 51.736" E	27° 9' 51.019" N	16.96	137674.84	29°44'55"(R)	858.660
2461	TP2447	661596.599	3005652.903	88° 37' 51.573" E	27° 9' 50.488" N	41.50	137691.80	18°1'43"(R)	857.821
2462	TP2448	661574.195	3005617.976	88° 37' 50.743" E	27° 9' 49.363" N	44.28	137733.29	17°41'14"(L)	855.598
2463	TP2449	661562.742	3005575.202	88° 37' 50.306" E	27° 9' 47.978" N	49.68	137777.57	17°35'58"(L)	853.612
2464	TP2450	661565.004	3005525.570	88° 37' 50.365" E	27° 9' 46.364" N	55.74	137827.26	49°57'56"(L)	850.918
2465	TP2451	661609.268	3005491.697	88° 37' 51.957" E	27° 9' 45.245" N	25.65	137883.00	4°24'33"(L)	846.505
2466	TP2452	661630.773	3005477.723	88° 37' 52.731" E	27° 9' 44.782" N	37.76	137908.64	4°41'26"(L)	844.343
2467	TP2453	661664.015	3005459.805	88° 37' 53.930" E	27° 9' 44.186" N	27.49	137946.41	37°32'23"(R)	841.117
2468	TP2454	661675.257	3005434.714	88° 37' 54.327" E	27° 9' 43.366" N	34.39	137973.90	35°1'34"(R)	838.881
2469	TP2455	661668.760	3005400.948	88° 37' 54.075" E	27° 9' 42.272" N	56.15	138008.28	7°49'44"(R)	836.538
2470	TP2456	661650.738	3005347.766	88° 37' 53.395" E	27° 9' 40.551" N	54.67	138064.44	36°9'39"(L)	833.986
2471	TP2457	661667.124	3005295.608	88° 37' 53.966" E	27° 9' 38.850" N	37.04	138119.11	23°45'9"(L)	830.158
2472	TP2458	661691.517	3005267.738	88° 37' 54.839" E	27° 9' 37.934" N	70.82	138156.15	25°27'0"(L)	827.225
2473	TP2459	661756.532	3005239.662	88° 37' 57.187" E	27° 9' 36.995" N	74.83	138226.96	7°55'8"(L)	822.715
2474	TP2460	661828.659	3005219.744	88° 37' 59.797" E	27° 9' 36.317" N	24.81	138301.79	24°19'44"(R)	818.547
2475	TP2461	661847.727	3005203.876	88° 38' 0.482" E	27° 9' 35.793" N	22.04	138326.60	1°23'47"(R)	817.309
2476	TP2462	661864.321	3005189.368	88° 38' 1.078" E	27° 9' 35.315" N	34.54	138348.64	2°59'52"(L)	814.816
2477	TP2463	661891.481	3005168.022	88° 38' 2.054" E	27° 9' 34.610" N	42.34	138383.18	13°33'17"(L)	810.652
2478	TP2464	661929.972	3005150.391	88° 38' 3.444" E	27° 9' 34.021" N	25.85	138425.52	25°0'26"(R)	804.902
2479	TP2465	661946.719	3005130.701	88° 38' 4.043" E	27° 9' 33.374" N	28.59	138451.37	37°20'48"(R)	799.199
2480	TP2466	661948.233	3005102.151	88° 38' 4.085" E	27° 9' 32.446" N	39.84	138479.96	35°36'40"(R)	795.179
2481	TP2467	661926.783	3005068.579	88° 38' 3.290" E	27° 9' 31.364" N	41.50	138519.80	8°43'45"(R)	793.198
2482	TP2468	661899.388	3005037.401	88° 38' 2.280" E	27° 9' 30.363" N	49.54	138561.30	3°37'15"(R)	794.860
2483	TP2469	661864.405	3005002.327	88° 38' 0.993" E	27° 9' 29.238" N	32.88	138610.84	27°51'40"(L)	799.187
2484	TP2470	661854.755	3004970.890	88° 38' 0.627" E	27° 9' 28.221" N	35.20	138643.73	5°51'26"(L)	798.250
2485	TP2471	661847.914	3004936.364	88° 38' 0.363" E	27° 9' 27.102" N	27.48	138678.92	4°38'24"(R)	795.217
2486	TP2472	661840.410	3004909.929	88° 38' 0.078" E	27° 9' 26.246" N	38.44	138706.40	35°50'37"(R)	792.747
2487	TP2473	661810.243	3004886.097	88° 37' 58.971" E	27° 9' 25.485" N	9.05	138744.85	2°17'11"(L)	790.094
2488	TP2474	661803.371	3004880.208	88° 37' 58.718" E	27° 9' 25.296" N	39.56	138753.90	20°53'9"(L)	798.700
2489	TP2475	661784.483	3004845.448	88° 37' 58.016" E	27° 9' 24.175" N	33.68	138793.46	11°52'15"(R)	786.801
2490	TP2476	661762.661	3004819.798	88° 37' 57.211" E	27° 9' 23.351" N	27.40	138827.13	2°41'46"(R)	758.292
2491	TP2477	661743.947	3004799.790	88° 37' 56.522" E	27° 9' 22.709" N	12.83	138854.53	42°32'25"(L)	783.314
2492	TP2478	661743.825	3004786.960	88° 37' 56.511" E	27° 9' 22.292" N	19.92	138867.36	36°39'17"(L)	783.385
2493	TP2479	661755.563	3004770.868	88° 37' 56.930" E	27° 9' 21.764" N	32.16	138887.28	8°24'26"(L)	782.909
2494	TP2480	661778.108	3004747.939	88° 37' 57.738" E	27° 9' 21.010" N	28.76	138919.43	8°11'17"(L)	781.000
2495	TP2481	661800.985	3004730.514	88° 37' 58.561" E	27° 9' 20.434" N	38.02	138948.19	7°17'50"(R)	779.638
2496	TP2482	661828.061	3004703.820	88° 37' 59.532" E	27° 9' 19.555" N	21.56	138986.21	4°58'46"(R)	777.730
2497	TP2483	661842.044	3004687.406	88° 38' 0.032" E	27° 9' 19.016" N	22.72	139007.78	28°12'9"(R)	776.384
2498	TP2484	661846.855	3004665.201	88° 38' 0.196" E	27° 9' 18.293" N	39.20	139030.50	16°51'12"(L)	775.509
2499	TP2485	661865.908	3004630.939	88° 38' 0.872" E	27° 9' 17.172" N	56.51	139069.70	24°52'8"(R)	772.814
2500	TP2486	661870.056	3004574.581	88° 38' 0.996" E	27° 9' 15.339" N	64.45	139126.21	30°25'57"(R)	767.230
2501	TP2487	661841.578	3004516.765	88° 37' 59.934" E	27° 9' 13.472" N	64.01	139190.66	25°34'58"(R)	764.240
2502	TP2488	661791.269	3004477.184	88° 37' 58.088" E	27° 9' 12.208" N	16.59	139254.67	18°51'57"(L)	766.799
2503	TP2489	661782.247	3004463.260	88° 37' 57.754" E	27° 9' 11.759" N	70.13	139271.26	10°31'25"(L)	766.212
2504	TP2490	661755.506	3004398.433	88° 37' 56.752" E	27° 9' 9.664" N	21.66	139341.39	26°5'18"(L)	764.040
2505	TP2491	661756.893	3004376.821	88° 37' 56.792" E	27° 9' 8.962" N	34.12	139363.05	20°26'49"(L)	764.298
2506	TP2492	661770.836	3004345.679	88° 37' 57.284" E	27° 9' 7.944" N	19.44	139397.17	15°54'12"(L)	762.286
2507	TP2493	661783.339	3004330.790	88° 37' 57.731" E	27° 9' 7.455" N	34.48	139416.61	3°14'1"(R)	761.095
2508	TP2494	661803.987	3004303.178	88° 37' 58.468" E	27° 9' 6.549" N	21.19	139451.09	33°7'21"(R)	757.956

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
2509	TP2495	661805.342	3004282.030	88° 37' 58.507" E	27° 9' 5.861" N	65.15	139472.28	8°11'57"(R)	756.371
2510	TP2496	661800.193	3004217.082	88° 37' 58.289" E	27° 9' 3.754" N	23.45	139537.43	25°0'39"(R)	751.200
2511	TP2497	661788.628	3004196.677	88° 37' 57.860" E	27° 9' 3.096" N	6.15	139560.89	25°0'39"(R)	750.395
2512	TP2498	661794.235	3004194.153	88° 37' 58.062" E	27° 9' 3.011" N	4.11	139567.03	29°59'48"(L)	749.670
2513	TP2499	661798.321	3004194.565	88° 37' 58.211" E	27° 9' 3.023" N	25.92	139571.14	52°31'57"(L)	749.232
2514	TP2500	661811.947	3004216.619	88° 37' 58.716" E	27° 9' 3.734" N	47.31	139597.07	19°3'13"(L)	746.712
2515	TP2501	661822.312	3004262.775	88° 37' 59.114" E	27° 9' 5.229" N	6.01	139644.37	83°35'22"(R)	746.379
2516	TP2502	661828.288	3004262.121	88° 37' 59.331" E	27° 9' 5.205" N	7.74	139650.38	39°4'31"(L)	743.895
2517	TP2503	661836.009	3004262.714	88° 37' 59.612" E	27° 9' 5.221" N	7.65	139658.13	86°5'31"(R)	742.534
2518	TP2504	661837.114	3004255.143	88° 37' 59.648" E	27° 9' 4.975" N	27.67	139665.78	19°16'35"(R)	741.341
2519	TP2505	661831.846	3004227.981	88° 37' 59.444" E	27° 9' 4.094" N	26.77	139693.45	5°10'4"(R)	739.459
2520	TP2506	661824.402	3004202.266	88° 37' 59.162" E	27° 9' 3.262" N	5.64	139720.22	87°3'37"(L)	736.489
2521	TP2507	661829.734	3004200.421	88° 37' 59.354" E	27° 9' 3.200" N	5.42	139725.86	12°5'57"(R)	735.069
2522	TP2508	661834.832	3004198.579	88° 37' 59.539" E	27° 9' 3.138" N	56.23	139731.28	87°23'20"(L)	733.933
2523	TP2509	661856.330	3004250.539	88° 38' 0.344" E	27° 9' 4.817" N	25.63	139787.51	15°4'25"(L)	728.490
2524	TP2510	661859.632	3004275.952	88° 38' 0.476" E	27° 9' 5.641" N	25.90	139813.14	19°22'48"(L)	725.752
2525	TP2511	661854.258	3004301.285	88° 38' 0.293" E	27° 9' 6.466" N	30.25	139839.03	10°49'8"(L)	723.411
2526	TP2512	661842.537	3004329.174	88° 37' 59.880" E	27° 9' 7.377" N	14.09	139869.29	10°49'8"(L)	720.144
2527	TP2513	661841.890	3004343.245	88° 37' 59.863" E	27° 9' 7.835" N	13.00	139883.37	33°34'31"(R)	719.346
2528	TP2514	661848.576	3004354.397	88° 38' 0.112" E	27° 9' 8.194" N	153.61	139896.38	15°15'28"(R)	718.717
2529	TP2515	661959.445	3004460.714	88° 38' 4.188" E	27° 9' 11.602" N	42.36	140049.98	11°42'3"(L)	708.820
2530	TP2516	661983.435	3004495.620	88° 38' 5.076" E	27° 9' 12.725" N	28.38	140092.34	29°30'4"(L)	708.816
2531	TP2517	661985.908	3004523.894	88° 38' 5.179" E	27° 9' 13.643" N	88.81	140120.72	18°28'49"(L)	707.120
2532	TP2518	661965.204	3004610.255	88° 38' 4.468" E	27° 9' 16.458" N	39.72	140209.53	3°17'38"(R)	700.953
2533	TP2519	661958.178	3004649.352	88° 38' 4.232" E	27° 9' 17.731" N	16.23	140249.25	13°26'25"(R)	698.975
2534	TP2520	661959.099	3004665.558	88° 38' 4.273" E	27° 9' 18.257" N	23.83	140265.48	22°50'10"(R)	698.607
2535	TP2521	661969.578	3004686.959	88° 38' 4.663" E	27° 9' 18.948" N	23.08	140289.31	17°9'44"(L)	697.158
2536	TP2522	661973.159	3004709.758	88° 38' 4.804" E	27° 9' 19.687" N	28.95	140312.39	42°40'57"(L)	696.118
2537	TP2523	661957.075	3004733.824	88° 38' 4.232" E	27° 9' 20.476" N	17.72	140341.34	26°28'17"(R)	694.610
2538	TP2524	661954.828	3004751.402	88° 38' 4.158" E	27° 9' 21.048" N	7.25	140359.06	49°26'21"(R)	693.227
2539	TP2525	661959.694	3004756.777	88° 38' 4.338" E	27° 9' 21.220" N	108.96	140366.31	7°12'20"(R)	693.786
2540	TP2526	662042.377	3004827.745	88° 38' 7.374" E	27° 9' 23.491" N	85.01	140475.27	27°38'0"(L)	688.001
2541	TP2527	662073.847	3004906.718	88° 38' 8.555" E	27° 9' 26.043" N	52.69	140560.28	17°40'35"(L)	683.922
2542	TP2528	662077.569	3004959.279	88° 38' 8.715" E	27° 9' 27.749" N	88.91	140612.98	11°1'45"(R)	682.112
2543	TP2529	662100.701	3005045.131	88° 38' 9.595" E	27° 9' 30.529" N	69.03	140701.89	17°52'53"(R)	679.292
2544	TP2530	662138.256	3005103.047	88° 38' 10.987" E	27° 9' 32.395" N	73.42	140770.92	42°29'38"(L)	671.920
2545	TP2531	662126.097	3005175.452	88° 38' 10.580" E	27° 9' 34.752" N	141.60	140844.33	9°48'46"(L)	665.406
2546	TP2532	662079.188	3005309.060	88° 38' 8.939" E	27° 9' 39.113" N	9.83	140985.94	85°0'53"(R)	658.250
2547	TP2533	662088.708	3005311.497	88° 38' 9.286" E	27° 9' 39.188" N	15.89	140995.76	55°28'49"(R)	657.072
2548	TP2534	662101.306	3005301.814	88° 38' 9.739" E	27° 9' 38.868" N	31.95	141011.65	18°44'53"(R)	671.920
2549	TP2535	662119.037	3005275.233	88° 38' 10.370" E	27° 9' 37.997" N	40.94	141043.61	11°6'6"(L)	652.390
2550	TP2536	662147.890	3005246.185	88° 38' 11.405" E	27° 9' 37.041" N	42.06	141084.55	15°22'25"(R)	650.962
2551	TP2537	662168.558	3005209.555	88° 38' 12.138" E	27° 9' 35.842" N	52.80	141126.61	18°9'52"(R)	647.207
2552	TP2538	662178.876	3005157.771	88° 38' 12.488" E	27° 9' 34.155" N	6.17	141179.41	88°44'14"(L)	642.830
2553	TP2539	662184.949	3005158.842	88° 38' 12.709" E	27° 9' 34.188" N	8.87	141185.58	8°12'8"(L)	640.317
2554	TP2540	662193.376	3005161.614	88° 38' 13.017" E	27° 9' 34.274" N	62.62	141194.45	64°19'23"(L)	637.683
2555	TP2541	662201.515	3005223.699	88° 38' 13.342" E	27° 9' 36.288" N	21.46	141257.06	38°16'54"(L)	631.760
2556	TP2542	662190.524	3005242.127	88° 38' 12.951" E	27° 9' 36.891" N	40.27	141278.52	5°22'44"(R)	630.352
2557	TP2543	662173.230	3005278.492	88° 38' 12.340" E	27° 9' 38.080" N	78.59	141318.79	11°55'5"(R)	628.450
2558	TP2544	662154.861	3005354.909	88° 38' 11.709" E	27° 9' 40.570" N	39.39	141397.38	7°50'6"(L)	622.104
2559	TP2545	662140.520	3005391.595	88° 38' 11.206" E	27° 9' 41.768" N	19.81	141436.77	21°32'0"(R)	619.185
2560	TP2546	662140.583	3005411.400	88° 38' 11.217" E	27° 9' 42.412" N	12.91	141456.58	4°49'14"(R)	617.012
2561	TP2547	662141.709	3005424.263	88° 38' 11.264" E	27° 9' 42.829" N	28.94	141469.49	10°39'4"(R)	615.808
2562	TP2548	662149.519	3005452.134	88° 38' 11.561" E	27° 9' 43.731" N	29.68	141498.43	6°6'42"(L)	613.300
2563	TP2549	662154.439	3005481.402	88° 38' 11.754" E	27° 9' 44.680" N	40.20	141528.11	42°6'6"(L)	611.003
2564	TP2550	662132.807	3005515.280	88° 38' 10.984" E	27° 9' 45.790" N	36.15	141568.31	14°54'14"(R)	608.800
2565	TP2551	662121.844	3005549.724	88° 38' 10.602" E	27° 9' 46.914" N	21.23	141604.45	18°26'33"(L)	608.520
2566	TP2552	662109.336	3005566.878	88° 38' 10.156" E	27° 9' 47.476" N	59.13	141625.68	23°2'30"(R)	607.741
2567	TP2553	662095.977	3005624.484	88° 38' 9.698" E	27° 9' 49.353" N	43.84	141684.82	26°33'11"(R)	602.101
2568	TP2554	662106.209	3005667.114	88° 38' 10.090" E	27° 9' 50.734" N	58.08	141728.66	14°19'24"(L)	600.101
2569	TP2555	662105.371	3005725.191	88° 38' 10.087" E	27° 9' 52.621" N	67.42	141786.74	40°18'45"(L)	593.866
2570	TP2556	662061.015	3005775.967	88° 38' 8.500" E	27° 9' 54.290" N	40.67	141854.16	2°30'31"(R)	591.470
2571	TP2557	662035.627	3005807.735	88° 38' 7.593" E	27° 9' 55.333" N	46.41	141894.83	14°21'24"(R)	591.951
2572	TP2558	662016.549	3005850.039	88° 38' 6.920" E	27° 9' 56.715" N	9.78	141941.24	14°21'24"(R)	588.182
2573	TP2559	662021.695	3005858.354	88° 38' 7.111" E	27° 9' 56.983" N	60.53	141951.02	29°11'33"(R)	588.052
2574	TP2560	662074.606	3005887.746	88° 38' 9.047" E	27° 9' 57.916" N	18.85	142011.54	44°5'11"(L)	588.264

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
2575	TP2561	662080.073	3005905.782	88° 38' 9.254" E	27° 9' 58.499" N	8.21	142030.39	82°46'12"(R)	588.512
2576	TP2562	662088.245	3005906.541	88° 38' 9.551" E	27° 9' 58.520" N	52.01	142038.60	85°12'25"(L)	588.964
2577	TP2563	662087.779	3005958.549	88° 38' 9.559" E	27° 10' 0.210" N	26.01	142090.61	4°25'17"(L)	588.428
2578	TP2564	662085.542	3005984.463	88° 38' 9.490" E	27° 10' 1.053" N	104.04	142116.62	31°4'42"(L)	589.016
2579	TP2565	662024.368	3006068.623	88° 38' 7.307" E	27° 10' 3.813" N	20.13	142220.66	20°50'57"(R)	584.070
2580	TP2566	662019.103	3006088.048	88° 38' 7.125" E	27° 10' 4.447" N	25.83	142240.79	15°18'31"(R)	584.378
2581	TP2567	662019.169	3006113.877	88° 38' 7.140" E	27° 10' 5.286" N	50.38	142266.61	37°9'32"(R)	584.679
2582	TP2568	662049.703	3006153.953	88° 38' 8.268" E	27° 10' 6.575" N	86.71	142317.00	40°31'48"(R)	587.781
2583	TP2569	662134.461	3006172.226	88° 38' 11.356" E	27° 10' 7.133" N	45.00	142403.70	9°29'14"(L)	591.108
2584	TP2570	662176.285	3006188.830	88° 38' 12.883" E	27° 10' 7.654" N	61.51	142448.70	24°44'53"(L)	593.361
2585	TP2571	662218.699	3006233.371	88° 38' 14.444" E	27° 10' 9.083" N	45.45	142510.21	17°55'50"(L)	596.853
2586	TP2572	662238.387	3006274.338	88° 38' 15.179" E	27° 10' 10.406" N	20.66	142555.66	37°52'14"(L)	599.289
2587	TP2573	662234.021	3006294.531	88° 38' 15.030" E	27° 10' 11.064" N	45.26	142576.32	37°16'30"(L)	600.617
2588	TP2574	662199.618	3006323.937	88° 38' 13.794" E	27° 10' 12.034" N	14.30	142621.58	14°51'8"(L)	603.442
2589	TP2575	662186.727	3006330.133	88° 38' 13.329" E	27° 10' 12.241" N	59.63	142635.88	26°25'35"(R)	601.920
2590	TP2576	662150.094	3006377.184	88° 38' 12.021" E	27° 10' 13.785" N	30.78	142695.51	23°21'18"(R)	606.669
2591	TP2577	662142.362	3006406.981	88° 38' 11.754" E	27° 10' 14.756" N	114.60	142726.29	47°59'44"(R)	607.747
2592	TP2578	662205.526	3006502.602	88° 38' 14.094" E	27° 10' 17.836" N	27.29	142840.89	26°4'25"(L)	614.530
2593	TP2579	662209.028	3006529.668	88° 38' 14.234" E	27° 10' 18.714" N	6.28	142868.19	27°54'5"(L)	616.257
2594	TP2580	662206.827	3006535.548	88° 38' 14.156" E	27° 10' 18.906" N	46.79	142874.46	41°33'13"(L)	614.891
2595	TP2581	662165.482	3006557.456	88° 38' 12.665" E	27° 10' 19.635" N	29.85	142921.25	18°59'6"(R)	617.008
2596	TP2582	662145.090	3006579.251	88° 38' 11.935" E	27° 10' 20.352" N	99.29	142951.10	16°26'37"(R)	618.668
2597	TP2583	662100.548	3006667.994	88° 38' 10.359" E	27° 10' 23.254" N	41.55	143050.40	26°42'10"(L)	626.771
2598	TP2584	662067.206	3006692.796	88° 38' 9.159" E	27° 10' 24.074" N	25.06	143091.95	34°12'29"(R)	629.465
2599	TP2585	662058.985	3006716.473	88° 38' 8.872" E	27° 10' 24.847" N	35.66	143117.01	13°30'49"(R)	628.090
2600	TP2586	662055.485	3006751.956	88° 38' 8.761" E	27° 10' 26.001" N	27.46	143152.67	24°11'58"(L)	623.240
2601	TP2587	662041.823	3006775.779	88° 38' 8.276" E	27° 10' 26.781" N	76.67	143180.13	14°4'22"(L)	633.298
2602	TP2588	661988.651	3006831.020	88° 38' 6.371" E	27° 10' 28.598" N	79.89	143256.81	16°55'53"(R)	636.460
2603	TP2589	661952.414	3006902.217	88° 38' 5.088" E	27° 10' 30.926" N	56.84	143336.69	9°18'14"(L)	639.804
2604	TP2590	661918.781	3006948.039	88° 38' 3.888" E	27° 10' 32.429" N	96.25	143393.54	7°4'49"(L)	644.693
2605	TP2591	661852.701	3007018.017	88° 38' 1.521" E	27° 10' 34.731" N	32.30	143489.78	7°23'54"(L)	651.769
2606	TP2592	661827.686	3007038.449	88° 38' 0.622" E	27° 10' 35.405" N	24.04	143522.08	17°52'42"(L)	653.937
2607	TP2593	661805.294	3007047.208	88° 37' 59.813" E	27° 10' 35.699" N	33.92	143546.12	33°4'17"(L)	654.743
2608	TP2594	661772.082	3007040.326	88° 37' 58.603" E	27° 10' 35.490" N	46.89	143580.04	42°39'52"(R)	655.753
2609	TP2595	661731.869	3007064.448	88° 37' 57.154" E	27° 10' 36.290" N	16.82	143626.94	42°39'52"(R)	659.007
2610	TP2596	661722.234	3007078.237	88° 37' 56.810" E	27° 10' 36.742" N	27.76	143643.76	22°43'24"(R)	659.879
2611	TP2597	661716.357	3007105.371	88° 37' 56.609" E	27° 10' 37.626" N	25.67	143671.52	12°47'1"(L)	662.295
2612	TP2598	661705.506	3007128.638	88° 37' 56.226" E	27° 10' 38.387" N	37.16	143697.19	24°49'32"(L)	663.726
2613	TP2599	661677.114	3007152.606	88° 37' 55.206" E	27° 10' 39.178" N	39.11	143734.35	13°37'17"(R)	665.172
2614	TP2600	661654.012	3007184.160	88° 37' 54.382" E	27° 10' 40.213" N	36.24	143773.46	6°1'25"(L)	667.608
2615	TP2601	661629.652	3007210.996	88° 37' 53.510" E	27° 10' 41.095" N	12.60	143809.70	14°12'23"(R)	669.612
2616	TP2602	661623.731	3007222.120	88° 37' 53.300" E	27° 10' 41.459" N	50.32	143822.30	5°45'40"(L)	670.382
2617	TP2603	661595.746	3007263.944	88° 37' 52.303" E	27° 10' 42.829" N	23.24	143872.62	10°27'55"(L)	673.359
2618	TP2604	661579.529	3007280.590	88° 37' 51.722" E	27° 10' 43.377" N	47.99	143895.86	6°46'41"(L)	674.628
2619	TP2605	661542.222	3007310.769	88° 37' 50.381" E	27° 10' 44.373" N	22.39	143943.85	8°48'21"(R)	676.636
2620	TP2606	661527.176	3007327.347	88° 37' 49.842" E	27° 10' 44.918" N	16.93	143966.24	88°0'44"(R)	677.805
2621	TP2607	661539.309	3007339.151	88° 37' 50.288" E	27° 10' 45.297" N	6.36	143983.16	25°9'37"(L)	678.232
2622	TP2608	661544.824	3007342.312	88° 37' 50.490" E	27° 10' 45.397" N	26.13	143989.52	89°49'12"(R)	680.157
2623	TP2609	661558.305	3007319.929	88° 37' 50.969" E	27° 10' 44.664" N	6.67	144015.65	24°43'17"(L)	680.623
2624	TP2610	661563.822	3007316.177	88° 37' 51.168" E	27° 10' 44.540" N	28.32	144022.32	19°55'33"(L)	680.946
2625	TP2611	661591.263	3007309.187	88° 37' 52.161" E	27° 10' 44.301" N	33.02	144050.64	19°26'31"(R)	682.789
2626	TP2612	661618.720	3007290.851	88° 37' 53.150" E	27° 10' 43.694" N	42.06	144083.66	5°9'18"(L)	684.637
2627	TP2613	661655.656	3007270.731	88° 37' 54.482" E	27° 10' 43.024" N	45.26	144125.72	24°36'11"(R)	687.205
2628	TP2614	661682.780	3007234.498	88° 37' 55.451" E	27° 10' 41.836" N	43.94	144170.98	11°53'17"(L)	688.768
2629	TP2615	661715.796	3007205.498	88° 37' 56.636" E	27° 10' 40.880" N	48.74	144214.92	14°33'20"(R)	691.344
2630	TP2616	661743.158	3007165.161	88° 37' 57.611" E	27° 10' 39.558" N	8.88	144263.66	3°5'2"(L)	639.972
2631	TP2617	661748.529	3007158.094	88° 37' 57.803" E	27° 10' 39.326" N	24.77	144272.54	61°16'1"(L)	694.677
2632	TP2618	661773.026	3007161.755	88° 37' 58.695" E	27° 10' 39.434" N	38.45	144297.31	18°26'18"(R)	697.638
2633	TP2619	661810.902	3007155.119	88° 38' 0.067" E	27° 10' 39.203" N	133.53	144335.76	13°13'51"(R)	698.892
2634	TP2620	661933.666	3007102.584	88° 38' 4.502" E	27° 10' 37.444" N	37.31	144469.29	26°24'48"(L)	704.967
2635	TP2621	661970.918	3007104.697	88° 38' 5.857" E	27° 10' 37.497" N	55.80	144506.61	36°35'58"(R)	705.951
2636	TP2622	662017.526	3007074.018	88° 38' 7.535" E	27° 10' 36.480" N	30.83	144562.40	30°10'52"(L)	708.787
2637	TP2623	662048.311	3007072.312	88° 38' 8.653" E	27° 10' 36.412" N	44.73	144593.24	37°54'38"(R)	709.557
2638	TP2624	662082.023	3007042.920	88° 38' 9.863" E	27° 10' 35.443" N	117.08	144637.96	35°40'2"(R)	711.117
2639	TP2625	662108.857	3006928.959	88° 38' 10.784" E	27° 10' 31.729" N	38.83	144755.04	80°52'2"(L)	714.950
2640	TP2626	662147.582	3006931.747	88° 38' 12.192" E	27° 10' 31.803" N	30.82	144793.87	15°9'53"(L)	720.911

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
2641	TP2627	662176.673	3006941.924	88° 38' 13.254" E	27° 10' 32.121" N	73.65	144824.68	57°6'17"(R)	723.126
2642	TP2628	662234.851	3006896.758	88° 38' 15.346" E	27° 10' 30.629" N	39.02	144898.34	19°27'7"(R)	725.200
2643	TP2629	662255.947	3006863.928	88° 38' 16.097" E	27° 10' 29.554" N	28.93	144937.36	6°10'17"(R)	725.682
2644	TP2630	662268.880	3006838.049	88° 38' 16.554" E	27° 10' 28.707" N	49.70	144966.29	38°45'43"(L)	728.647
2645	TP2631	662314.035	3006817.295	88° 38' 18.185" E	27° 10' 28.014" N	47.15	145015.99	18°57'59"(R)	731.511
2646	TP2632	662348.149	3006784.750	88° 38' 19.408" E	27° 10' 26.942" N	23.11	145063.13	35°22'14"(L)	733.643
2647	TP2633	662371.016	3006781.422	88° 38' 20.237" E	27° 10' 26.824" N	34.37	145086.24	4°10'24"(R)	735.102
2648	TP2634	662404.578	3006774.010	88° 38' 21.453" E	27° 10' 26.569" N	82.13	145120.61	16°1'56"(L)	736.596
2649	TP2635	662486.551	3006779.136	88° 38' 24.433" E	27° 10' 26.701" N	36.84	145202.75	70°3'50"(R)	744.141
2650	TP2636	662501.248	3006745.359	88° 38' 24.951" E	27° 10' 25.597" N	32.51	145239.58	7°5'36"(R)	743.995
2651	TP2637	662510.439	3006714.171	88° 38' 25.270" E	27° 10' 24.580" N	81.41	145272.10	17°39'57"(L)	745.017
2652	TP2638	662556.066	3006646.747	88° 38' 26.896" E	27° 10' 22.370" N	51.32	145353.51	1°10'48"(R)	751.035
2653	TP2639	662583.947	3006603.660	88° 38' 27.888" E	27° 10' 20.959" N	19.56	145404.83	14°8'3"(R)	754.137
2654	TP2640	662590.241	3006585.142	88° 38' 28.108" E	27° 10' 20.354" N	47.53	145424.39	20°48'13"(R)	755.538
2655	TP2641	662588.557	3006537.645	88° 38' 28.024" E	27° 10' 18.812" N	42.51	145471.91	6°23'19"(R)	759.418
2656	TP2642	662582.332	3006495.592	88° 38' 27.778" E	27° 10' 17.448" N	13.03	145514.43	19°58'6"(L)	762.392
2657	TP2643	662586.854	3006483.373	88° 38' 27.936" E	27° 10' 17.049" N	18.62	145527.45	89°4'4"(L)	763.060
2658	TP2644	662604.416	3006489.550	88° 38' 28.577" E	27° 10' 17.243" N	9.39	145546.07	24°14'20"(R)	762.870
2659	TP2645	662613.793	3006490.026	88° 38' 28.918" E	27° 10' 17.254" N	97.80	145555.46	87°1'35"(L)	766.072
2660	TP2646	662613.901	3006587.825	88° 38' 28.968" E	27° 10' 20.431" N	46.71	145653.26	17°50'0"(L)	765.971
2661	TP2647	662599.646	3006632.303	88° 38' 28.472" E	27° 10' 21.882" N	77.24	145699.96	5°28'55"(L)	767.798
2662	TP2648	662569.154	3006703.270	88° 38' 27.398" E	27° 10' 24.201" N	73.71	145777.20	17°40'18"(R)	772.723
2663	TP2649	662561.987	3006776.630	88° 38' 27.172" E	27° 10' 26.587" N	29.85	145850.91	11°14'8"(R)	775.638
2664	TP2650	662564.928	3006806.333	88° 38' 27.293" E	27° 10' 27.551" N	82.56	145880.76	53°26'57"(L)	777.917
2665	TP2651	662503.775	3006861.796	88° 38' 25.098" E	27° 10' 29.379" N	17.32	145963.32	40°1'59"(L)	775.638
2666	TP2652	662486.465	3006862.453	88° 38' 24.470" E	27° 10' 29.408" N	19.41	145980.64	16°6'7"(L)	782.186
2667	TP2653	662467.625	3006857.780	88° 38' 23.783" E	27° 10' 29.264" N	28.95	146000.05	22°40'32"(R)	782.300
2668	TP2654	662439.015	3006862.182	88° 38' 22.746" E	27° 10' 29.419" N	31.35	146029.00	32°25'42"(R)	784.455
2669	TP2655	662415.421	3006882.820	88° 38' 21.899" E	27° 10' 30.100" N	52.03	146060.35	38°9'18"(R)	786.059
2670	TP2656	662405.787	3006933.953	88° 38' 21.573" E	27° 10' 31.765" N	52.17	146112.38	5°6'2"(L)	790.500
2671	TP2657	662391.609	3006984.157	88° 38' 21.082" E	27° 10' 33.402" N	94.42	146164.55	8°55'33"(L)	793.842
2672	TP2658	662352.159	3007069.943	88° 38' 19.689" E	27° 10' 36.206" N	34.19	146258.97	10°8'18"(R)	801.251
2673	TP2659	662343.565	3007103.037	88° 38' 19.393" E	27° 10' 37.285" N	18.50	146293.16	23°16'57"(L)	803.270
2674	TP2660	662332.214	3007117.650	88° 38' 18.987" E	27° 10' 37.764" N	37.46	146311.66	22°31'23"(L)	803.765
2675	TP2661	662299.658	3007136.172	88° 38' 17.814" E	27° 10' 38.380" N	47.77	146349.12	57°23'17"(R)	804.661
2676	TP2662	662297.179	3007183.881	88° 38' 17.746" E	27° 10' 39.931" N	78.81	146396.89	68°30'15"(L)	807.415
2677	TP2663	662222.446	3007208.916	88° 38' 15.043" E	27° 10' 40.776" N	60.33	146475.71	11°51'52"(R)	811.622
2678	TP2664	662170.403	3007239.432	88° 38' 13.167" E	27° 10' 41.790" N	36.85	146536.04	25°48'54"(R)	815.029
2679	TP2665	662149.901	3007270.056	88° 38' 12.437" E	27° 10' 42.793" N	27.73	146572.89	4°31'37"(L)	817.371
2680	TP2666	662132.703	3007291.813	88° 38' 11.822" E	27° 10' 43.507" N	56.30	146600.63	25°3'2"(L)	818.744
2681	TP2667	662082.368	3007317.044	88° 38' 10.006" E	27° 10' 44.348" N	38.44	146656.93	5°54'15"(L)	821.295
2682	TP2668	662046.415	3007330.643	88° 38' 8.706" E	27° 10' 44.806" N	50.02	146695.37	17°12'7"(L)	824.104
2683	TP2669	661996.493	3007333.710	88° 38' 6.894" E	27° 10' 44.926" N	42.60	146745.38	10°52'8"(L)	826.305
2684	TP2670	661954.240	3007328.259	88° 38' 5.357" E	27° 10' 44.767" N	39.54	146787.99	15°5'44"(R)	828.353
2685	TP2671	661915.062	3007333.586	88° 38' 3.936" E	27° 10' 44.957" N	60.96	146827.53	76°3'30"(R)	830.629
2686	TP2672	661908.481	3007394.188	88° 38' 3.725" E	27° 10' 46.928" N	40.88	146888.48	13°17'49"(R)	835.352
2687	TP2673	661913.533	3007434.757	88° 38' 3.928" E	27° 10' 48.244" N	85.54	146929.37	9°49'21"(L)	837.912
2688	TP2674	661909.468	3007520.202	88° 38' 3.821" E	27° 10' 51.022" N	66.71	147014.91	29°28'40"(R)	842.173
2689	TP2675	661939.498	3007579.771	88° 38' 4.940" E	27° 10' 52.945" N	135.89	147081.62	56°42'22"(L)	844.706
2690	TP2676	661871.651	3007697.515	88° 38' 2.531" E	27° 10' 56.799" N	30.72	147217.51	7°0'31"(R)	842.364
2691	TP2677	661859.675	3007725.806	88° 38' 2.109" E	27° 10' 57.723" N	13.09	147248.23	33°47'9"(L)	842.355
2692	TP2678	661848.732	3007732.986	88° 38' 1.715" E	27° 10' 57.961" N	38.55	147261.32	33°47'9"(L)	843.824
2693	TP2679	661831.918	3007767.672	88° 38' 1.121" E	27° 10' 59.095" N	13.69	147299.87	35°29'38"(R)	841.388
2694	TP2680	661834.209	3007781.167	88° 38' 1.210" E	27° 10' 59.532" N	76.51	147313.56	43°7'29"(L)	837.128
2695	TP2681	661791.989	3007844.972	88° 37' 59.707" E	27° 11' 1.623" N	30.80	147390.06	17°17'23"(L)	835.880
2696	TP2682	661768.129	3007864.444	88° 37' 58.849" E	27° 11' 2.266" N	23.33	147420.86	8°24'31"(L)	833.786
2697	TP2683	661748.095	3007876.391	88° 37' 58.127" E	27° 11' 2.663" N	49.29	147444.19	17°51'50"(R)	832.213
2698	TP2684	661715.544	3007913.408	88° 37' 56.962" E	27° 11' 3.879" N	58.32	147493.48	4°7'18"(R)	828.792
2699	TP2685	661680.280	3007959.858	88° 37' 55.703" E	27° 11' 5.403" N	36.61	147551.80	22°6'16"(L)	825.466
2700	TP2686	661648.798	3007978.544	88° 37' 54.568" E	27° 11' 6.023" N	69.37	147588.41	7°36'22"(L)	823.367
2701	TP2687	661584.984	3008005.742	88° 37' 52.263" E	27° 11' 6.934" N	31.03	147657.78	18°53'2"(L)	820.565
2702	TP2688	661554.041	3008008.014	88° 37' 51.139" E	27° 11' 7.021" N	50.31	147688.80	5°56'35"(L)	820.167
2703	TP2689	661503.755	3008006.484	88° 37' 49.312" E	27° 11' 6.992" N	27.81	147739.11	10°28'49"(R)	819.102
2704	TP2690	661476.265	3008010.709	88° 37' 48.315" E	27° 11' 7.141" N	29.37	147766.93	14°7'51"(R)	818.704
2705	TP2691	661449.205	3008022.122	88° 37' 47.337" E	27° 11' 7.524" N	40.28	147796.29	5°44'45"(R)	817.167
2706	TP2692	661413.842	3008041.414	88° 37' 46.062" E	27° 11' 8.165" N	20.72	147836.58	12°18'8"(L)	815.427

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
2707	TP2693	661393.958	3008047.233	88° 37' 45.342" E	27° 11' 8.363" N	26.05	147857.30	6°40'9"(L)	814.438
2708	TP2694	661368.279	3008051.596	88° 37' 44.411" E	27° 11' 8.515" N	27.19	147883.34	15°0'21"(R)	812.834
2709	TP2695	661343.570	3008062.934	88° 37' 43.519" E	27° 11' 8.894" N	58.43	147910.53	10°37'30"(R)	811.724
2710	TP2696	661295.869	3008096.675	88° 37' 41.802" E	27° 11' 10.010" N	73.84	147968.96	9°47'7"(L)	808.579
2711	TP2697	661229.218	3008128.449	88° 37' 39.395" E	27° 11' 11.071" N	27.48	148042.79	49°11'9"(R)	801.505
2712	TP2698	661221.955	3008154.951	88° 37' 39.144" E	27° 11' 11.935" N	51.51	148070.27	9°59'13"(L)	800.502
2713	TP2699	661199.932	3008201.514	88° 37' 38.366" E	27° 11' 13.457" N	40.17	148121.78	23°7'31"(L)	799.524
2714	TP2700	661169.875	3008228.164	88° 37' 37.287" E	27° 11' 14.335" N	35.59	148161.95	3°19'18"(L)	797.561
2715	TP2701	661141.924	3008250.191	88° 37' 36.281" E	27° 11' 15.063" N	64.21	148197.54	7°29'45"(L)	796.387
2716	TP2702	661086.741	3008283.014	88° 37' 34.292" E	27° 11' 16.153" N	23.91	148261.75	18°23'16"(R)	794.775
2717	TP2703	661071.099	3008301.092	88° 37' 33.732" E	27° 11' 16.746" N	21.86	148285.65	18°17'26"(L)	794.782
2718	TP2704	661052.330	3008312.299	88° 37' 33.056" E	27° 11' 17.119" N	29.83	148307.51	30°56'15"(L)	793.364
2719	TP2705	661022.503	3008312.249	88° 37' 31.972" E	27° 11' 17.129" N	28.93	148337.34	5°39'1"(L)	792.799
2720	TP2706	660993.714	3008309.352	88° 37' 30.925" E	27° 11' 17.047" N	31.93	148366.27	21°55'9"(R)	790.587
2721	TP2707	660963.043	3008318.247	88° 37' 29.815" E	27° 11' 17.349" N	34.76	148398.21	18°47'55"(R)	788.185
2722	TP2708	660934.557	3008338.172	88° 37' 28.789" E	27° 11' 18.009" N	20.22	148432.97	33°34'19"(R)	786.302
2723	TP2709	660927.162	3008356.987	88° 37' 28.529" E	27° 11' 18.623" N	12.17	148453.19	68°32'38"(R)	784.859
2724	TP2710	660936.078	3008365.276	88° 37' 28.857" E	27° 11' 18.889" N	37.09	148465.36	56°58'30"(R)	784.600
2725	TP2711	660972.052	3008356.265	88° 37' 30.160" E	27° 11' 18.581" N	24.62	148502.45	5°24'17"(L)	783.027
2726	TP2712	660996.388	3008352.560	88° 37' 31.042" E	27° 11' 18.450" N	26.08	148527.06	33°38'46"(L)	780.464
2727	TP2713	661020.026	3008363.577	88° 37' 31.906" E	27° 11' 18.798" N	81.57	148553.14	12°37'57"(L)	778.648
2728	TP2714	661084.636	3008413.372	88° 37' 34.277" E	27° 11' 20.389" N	30.47	148634.71	12°35'23"(R)	772.938
2729	TP2715	661112.245	3008426.265	88° 37' 35.286" E	27° 11' 20.796" N	11.40	148665.19	29°36'23"(L)	771.752
2730	TP2716	661118.845	3008435.565	88° 37' 35.530" E	27° 11' 21.095" N	15.64	148676.59	81°37'24"(L)	770.971
2731	TP2717	661107.542	3008446.381	88° 37' 35.125" E	27° 11' 21.451" N	16.18	148692.23	14°19'56"(L)	769.052
2732	TP2718	661091.512	3008444.209	88° 37' 34.541" E	27° 11' 21.388" N	30.76	148708.41	19°47'2"(L)	767.852
2733	TP2719	661064.765	3008429.012	88° 37' 33.562" E	27° 11' 20.905" N	41.07	148739.17	10°43'0"(R)	765.982
2734	TP2720	661025.903	3008415.716	88° 37' 32.144" E	27° 11' 20.490" N	31.36	148780.25	36°1'37"(R)	762.803
2735	TP2721	660995.935	3008424.958	88° 37' 31.060" E	27° 11' 20.802" N	21.93	148811.61	12°46'12"(R)	761.509
2736	TP2722	660976.924	3008435.894	88° 37' 30.374" E	27° 11' 21.166" N	56.04	148833.54	13°38'53"(R)	759.728
2737	TP2723	660936.310	3008474.513	88° 37' 28.917" E	27° 11' 22.438" N	38.16	148889.58	7°15'19"(L)	756.971
2738	TP2724	660905.554	3008497.107	88° 37' 27.810" E	27° 11' 23.185" N	14.68	148927.75	89°43'24"(R)	755.509
2739	TP2725	660914.186	3008508.976	88° 37' 28.129" E	27° 11' 23.567" N	10.18	148942.42	20°39'55"(L)	754.499
2740	TP2726	660920.658	3008516.835	88° 37' 28.368" E	27° 11' 23.819" N	17.19	148952.60	82°26'56"(R)	752.932
2741	TP2727	660935.246	3008507.747	88° 37' 28.894" E	27° 11' 23.518" N	23.55	148969.79	13°4'33"(R)	751.032
2742	TP2728	660951.901	3008491.094	88° 37' 29.491" E	27° 11' 22.970" N	37.20	148993.34	35°22'18"(L)	749.459
2743	TP2729	660988.573	3008484.875	88° 37' 30.821" E	27° 11' 22.752" N	66.48	149030.54	20°2'4"(L)	747.109
2744	TP2730	661053.960	3008496.887	88° 37' 33.202" E	27° 11' 23.115" N	25.81	149097.02	8°2'56"(R)	741.442
2745	TP2731	661079.749	3008497.950	88° 37' 34.139" E	27° 11' 23.139" N	24.41	149122.83	18°13'56"(L)	741.264
2746	TP2732	661102.595	3008506.534	88° 37' 34.973" E	27° 11' 23.408" N	59.62	149147.24	18°23'46"(L)	739.968
2747	TP2733	661148.938	3008544.047	88° 37' 36.675" E	27° 11' 24.607" N	56.55	149206.86	21°18'31"(R)	739.642
2748	TP2734	661202.818	3008561.222	88° 37' 38.640" E	27° 11' 25.142" N	26.93	149263.41	12°33'41"(R)	739.309
2749	TP2735	661229.643	3008563.625	88° 37' 39.616" E	27° 11' 25.209" N	34.58	149290.34	7°45'51"(L)	738.603
2750	TP2736	661263.348	3008571.334	88° 37' 40.844" E	27° 11' 25.445" N	31.25	149324.92	13°56'32"(L)	735.373
2751	TP2737	661291.232	3008585.435	88° 37' 41.864" E	27° 11' 25.892" N	36.66	149356.16	23°33'15"(L)	734.884
2752	TP2738	661314.612	3008613.675	88° 37' 42.727" E	27° 11' 26.799" N	33.43	149392.83	16°4'39"(L)	732.997
2753	TP2739	661327.966	3008644.325	88° 37' 43.226" E	27° 11' 27.789" N	16.16	149426.26	5°16'43"(L)	730.598
2754	TP2740	661333.030	3008659.669	88° 37' 43.418" E	27° 11' 28.286" N	31.31	149442.42	9°35'29"(L)	727.010
2755	TP2741	661337.751	3008690.621	88° 37' 43.604" E	27° 11' 29.289" N	33.19	149473.73	6°27'1"(L)	726.336
2756	TP2742	661339.039	3008723.784	88° 37' 43.666" E	27° 11' 30.366" N	7.42	149506.91	21°39'30"(R)	724.112
2757	TP2743	661342.041	3008730.565	88° 37' 43.779" E	27° 11' 30.585" N	45.37	149514.33	26°30'7"(R)	723.937
2758	TP2744	661376.993	3008759.497	88° 37' 45.062" E	27° 11' 31.511" N	25.78	149559.70	6°29'43"(L)	721.201
2759	TP2745	661394.863	3008778.075	88° 37' 45.720" E	27° 11' 32.107" N	11.26	149585.48	85°47'4"(L)	720.016
2760	TP2746	661387.342	3008786.458	88° 37' 45.451" E	27° 11' 32.382" N	8.09	149596.74	5°16'10"(R)	719.172
2761	TP2747	661381.783	3008792.334	88° 37' 45.252" E	27° 11' 32.575" N	14.73	149604.83	5°16'10"(R)	718.337
2762	TP2748	661368.612	3008785.740	88° 37' 44.770" E	27° 11' 32.367" N	37.92	149619.56	15°57'45"(L)	717.127
2763	TP2749	661340.678	3008760.092	88° 37' 43.743" E	27° 11' 31.545" N	39.38	149657.48	0°7'14"(L)	714.998
2764	TP2750	661311.724	3008733.395	88° 37' 42.678" E	27° 11' 30.690" N	43.42	149696.87	28°14'10"(L)	711.341
2765	TP2751	661297.527	3008692.365	88° 37' 42.143" E	27° 11' 29.363" N	39.12	149740.28	6°44'47"(R)	709.051
2766	TP2752	661280.481	3008657.155	88° 37' 41.507" E	27° 11' 28.226" N	17.80	149779.40	5°6'24"(R)	707.161
2767	TP2753	661271.332	3008641.892	88° 37' 41.168" E	27° 11' 27.734" N	25.12	149797.20	18°17'15"(R)	705.224
2768	TP2754	661252.305	3008625.484	88° 37' 40.469" E	27° 11' 27.209" N	38.78	149822.32	13°40'45"(R)	704.451
2769	TP2755	661217.781	3008607.822	88° 37' 39.206" E	27° 11' 26.650" N	45.26	149861.10	24°57'35"(R)	701.323
2770	TP2756	661172.557	3008606.137	88° 37' 37.562" E	27° 11' 26.614" N	30.76	149906.36	12°54'26"(R)	699.051
2771	TP2757	661142.338	3008611.887	88° 37' 36.467" E	27° 11' 26.814" N	42.02	149937.12	9°56'2"(R)	698.318
2772	TP2758	661103.030	3008626.746	88° 37' 35.046" E	27° 11' 27.313" N	40.30	149979.14	14°50'50"(L)	693.243

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
2773	TP2759	661062.936	3008630.861	88° 37' 33.591" E	27° 11' 27.464" N	32.83	150019.45	13°18'47"(L)	692.709
2774	TP2760	661030.380	3008626.602	88° 37' 32.406" E	27° 11' 27.339" N	43.16	150052.28	8°25'45"(L)	690.704
2775	TP2761	660988.865	3008614.790	88° 37' 30.892" E	27° 11' 26.973" N	13.49	150095.44	19°12'18"(R)	688.808
2776	TP2762	660975.402	3008615.572	88° 37' 30.404" E	27° 11' 27.004" N	14.92	150108.93	89°2'42"(R)	688.123
2777	TP2763	660976.018	3008630.477	88° 37' 30.433" E	27° 11' 27.488" N	10.50	150123.85	10°12'33"(L)	686.482
2778	TP2764	660978.652	3008640.644	88° 37' 30.534" E	27° 11' 27.817" N	47.80	150134.35	66°53'42"(R)	684.843
2779	TP2765	661025.920	3008647.776	88° 37' 32.254" E	27° 11' 28.029" N	38.18	150182.15	7°26'13"(L)	683.109
2780	TP2766	661062.621	3008658.312	88° 37' 33.593" E	27° 11' 28.356" N	67.86	150220.34	12°58'20"(R)	680.742
2781	TP2767	661130.381	3008661.917	88° 37' 36.056" E	27° 11' 28.444" N	43.52	150288.19	21°35'23"(R)	678.498
2782	TP2768	661171.641	3008648.076	88° 37' 37.549" E	27° 11' 27.977" N	25.46	150331.71	51°33'38"(L)	677.325
2783	TP2769	661192.992	3008661.950	88° 37' 38.331" E	27° 11' 28.419" N	34.87	150357.17	25°49'46"(L)	676.406
2784	TP2770	661211.032	3008691.791	88° 37' 39.000" E	27° 11' 29.381" N	43.64	150392.04	11°40'55"(R)	673.687
2785	TP2771	661240.706	3008723.795	88° 37' 40.094" E	27° 11' 30.408" N	44.23	150435.69	15°14'15"(L)	671.490
2786	TP2772	661261.197	3008762.992	88° 37' 40.857" E	27° 11' 31.673" N	24.27	150479.92	14°31'29"(L)	668.725
2787	TP2773	661266.688	3008786.636	88° 37' 41.067" E	27° 11' 32.439" N	41.18	150504.19	23°16'21"(L)	668.088
2788	TP2774	661259.397	3008827.165	88° 37' 40.822" E	27° 11' 33.759" N	40.99	150545.37	7°24'13"(L)	665.863
2789	TP2775	661247.001	3008866.238	88° 37' 40.390" E	27° 11' 35.033" N	52.11	150586.36	18°40'2"(L)	664.353
2790	TP2776	661216.173	3008908.253	88° 37' 39.289" E	27° 11' 36.411" N	5.71	150638.47	1°8'28"(L)	660.857
2791	TP2777	661212.706	3008912.786	88° 37' 39.166" E	27° 11' 36.560" N	66.20	150644.18	13°19'1"(L)	660.673
2792	TP2778	661161.459	3008954.691	88° 37' 37.323" E	27° 11' 37.943" N	22.42	150710.38	14°31'54"(R)	655.989
2793	TP2779	661148.220	3008972.783	88° 37' 36.851" E	27° 11' 38.536" N	53.48	150732.80	30°36'14"(R)	654.389
2794	TP2780	661143.009	3009026.012	88° 37' 36.687" E	27° 11' 40.268" N	36.16	150786.28	30°36'14"(R)	651.159
2795	TP2781	661143.941	3009062.157	88° 37' 36.738" E	27° 11' 41.442" N	13.87	150822.44	85°42'13"(R)	649.044
2796	TP2782	661130.141	3009063.552	88° 37' 36.237" E	27° 11' 41.493" N	27.22	150836.31	87°18'26"(R)	647.228
2797	TP2783	661126.134	3009036.631	88° 37' 36.079" E	27° 11' 40.620" N	50.18	150863.53	1°41'58"(R)	645.789
2798	TP2784	661120.222	3008986.804	88° 37' 35.840" E	27° 11' 39.004" N	32.28	150913.70	17°8'3"(R)	641.869
2799	TP2785	661126.031	3008955.052	88° 37' 36.036" E	27° 11' 37.970" N	58.32	150945.98	16°19'52"(R)	639.429
2800	TP2786	661152.234	3008902.950	88° 37' 36.964" E	27° 11' 36.266" N	28.16	151004.30	3°14'36"(L)	635.100
2801	TP2787	661163.443	3008877.116	88° 37' 37.359" E	27° 11' 35.422" N	23.89	151032.46	3°13'19"(L)	632.798
2802	TP2788	661171.706	3008854.698	88° 37' 37.649" E	27° 11' 34.690" N	26.85	151056.36	19°43'39"(L)	631.319
2803	TP2789	661171.943	3008827.845	88° 37' 37.644" E	27° 11' 33.818" N	7.70	151083.21	31°16'22"(L)	629.929
2804	TP2790	661168.006	3008821.232	88° 37' 37.498" E	27° 11' 33.604" N	69.89	151090.91	57°30'42"(L)	628.152
2805	TP2791	661098.150	3008819.133	88° 37' 34.959" E	27° 11' 33.566" N	50.46	151160.79	6°3'45"(R)	625.159
2806	TP2792	661048.154	3008812.299	88° 37' 33.140" E	27° 11' 33.365" N	19.47	151211.25	17°31'48"(R)	623.187
2807	TP2793	661030.549	3008803.972	88° 37' 32.496" E	27° 11' 33.102" N	36.48	151230.73	29°25'3"(L)	622.853
2808	TP2794	660994.158	3008806.583	88° 37' 31.175" E	27° 11' 33.202" N	67.90	151267.21	21°14'49"(L)	621.204
2809	TP2795	660932.801	3008835.653	88° 37' 28.960" E	27° 11' 34.172" N	9.15	151335.11	36°48'7"(R)	616.682
2810	TP2796	660923.830	3008833.836	88° 37' 28.633" E	27° 11' 34.117" N	32.54	151344.26	18°16'59"(R)	616.111
2811	TP2797	660895.570	3008817.694	88° 37' 27.598" E	27° 11' 33.604" N	27.14	151376.81	8°40'16"(L)	614.822
2812	TP2798	660870.245	3008807.941	88° 37' 26.674" E	27° 11' 33.298" N	73.30	151403.95	5°53'2"(L)	613.322
2813	TP2799	660799.505	3008788.749	88° 37' 24.095" E	27° 11' 32.704" N	29.98	151477.24	42°7'14"(R)	608.745
2814	TP2800	660783.310	3008763.523	88° 37' 23.494" E	27° 11' 31.892" N	25.37	151507.22	5°1'46"(L)	608.251
2815	TP2801	660767.787	3008743.460	88° 37' 22.921" E	27° 11' 31.246" N	33.67	151532.59	41°37'32"(L)	607.355
2816	TP2802	660734.693	3008737.240	88° 37' 21.716" E	27° 11' 31.058" N	45.79	151566.26	10°52'56"(L)	605.542
2817	TP2803	660688.901	3008737.430	88° 37' 20.052" E	27° 11' 31.084" N	12.16	151612.05	85°52'53"(L)	603.470
2818	TP2804	660688.078	3008749.560	88° 37' 20.028" E	27° 11' 31.478" N	15.14	151624.21	49°45'2"(R)	599.739
2819	TP2805	660687.731	3008764.693	88° 37' 20.022" E	27° 11' 31.970" N	22.10	151639.35	86°57'40"(L)	598.817
2820	TP2806	660709.820	3008764.028	88° 37' 20.824" E	27° 11' 31.939" N	35.10	151661.45	9°56'59"(R)	596.289
2821	TP2807	660744.561	3008769.050	88° 37' 22.089" E	27° 11' 32.087" N	22.90	151696.55	32°11'27"(R)	593.458
2822	TP2808	660761.995	3008783.896	88° 37' 22.729" E	27° 11' 32.562" N	33.58	151719.45	26°26'54"(R)	592.884
2823	TP2809	660775.189	3008814.776	88° 37' 23.223" E	27° 11' 33.560" N	27.70	151753.03	26°26'54"(R)	590.391
2824	TP2810	660795.949	3008833.114	88° 37' 23.986" E	27° 11' 34.147" N	31.79	151780.73	34°18'9"(L)	589.448
2825	TP2811	660827.493	3008837.073	88° 37' 25.134" E	27° 11' 34.263" N	64.57	151812.52	21°17'43"(R)	585.833
2826	TP2812	660884.268	3008867.832	88° 37' 27.211" E	27° 11' 35.238" N	26.61	151877.09	8°38'30"(R)	583.106
2827	TP2813	660905.491	3008883.877	88° 37' 27.990" E	27° 11' 35.750" N	17.19	151903.70	9°39'25"(L)	581.612
2828	TP2814	660920.752	3008891.798	88° 37' 28.548" E	27° 11' 36.001" N	30.32	151920.89	34°49'45"(L)	580.444
2829	TP2815	660950.823	3008887.895	88° 37' 29.639" E	27° 11' 35.862" N	21.05	151951.21	15°8'13"(R)	579.144
2830	TP2816	660971.679	3008890.730	88° 37' 30.398" E	27° 11' 35.945" N	5.83	151972.26	11°57'43"(R)	578.600
2831	TP2817	660977.169	3008892.696	88° 37' 30.598" E	27° 11' 36.007" N	25.55	151978.09	32°5'13"(R)	577.180
2832	TP2818	660992.970	3008912.768	88° 37' 31.182" E	27° 11' 36.652" N	45.93	152003.64	16°57'15"(R)	577.321
2833	TP2819	661009.622	3008955.575	88° 37' 31.807" E	27° 11' 38.036" N	32.30	152049.57	35°31'10"(R)	575.237
2834	TP2820	661001.663	3008986.883	88° 37' 31.533" E	27° 11' 39.056" N	37.76	152081.87	7°18'29"(R)	572.600
2835	TP2821	660987.780	3009022.000	88° 37' 31.045" E	27° 11' 40.203" N	25.30	152119.64	15°5'14"(L)	570.006
2836	TP2822	660984.922	3009047.143	88° 37' 30.953" E	27° 11' 41.021" N	55.85	152144.94	31°6'31"(L)	568.206
2837	TP2823	661008.193	3009097.914	88° 37' 31.822" E	27° 11' 42.661" N	20.78	152200.79	17°9'49"(R)	564.456
2838	TP2824	661010.891	3009118.519	88° 37' 31.930" E	27° 11' 43.329" N	15.85	152221.57	88°24'34"(R)	563.373

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S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
2839	TP2825	660995.234	3009121.013	88° 37' 31.362" E	27° 11' 43.417" N	55.44	152237.43	64°20'33"(R)	561.921
2840	TP2826	660970.040	3009071.633	88° 37' 30.424" E	27° 11' 41.823" N	29.11	152292.86	5°12'1"(R)	558.142
2841	TP2827	660959.214	3009044.608	88° 37' 30.018" E	27° 11' 40.950" N	29.88	152321.97	3°37'19"(L)	555.901
2842	TP2828	660946.374	3009017.631	88° 37' 29.538" E	27° 11' 40.079" N	34.97	152351.85	27°1'51"(R)	553.018
2843	TP2829	660947.337	3008982.676	88° 37' 29.557" E	27° 11' 38.943" N	30.73	152386.82	20°26'24"(L)	551.201
2844	TP2830	660937.402	3008953.596	88° 37' 29.182" E	27° 11' 38.002" N	28.34	152417.55	69°31'0"(L)	549.412
2845	TP2831	660909.071	3008952.794	88° 37' 28.153" E	27° 11' 37.988" N	27.42	152445.89	31°4'6"(L)	547.997
2846	TP2832	660885.196	3008966.272	88° 37' 27.291" E	27° 11' 38.436" N	17.50	152473.31	26°21'5"(R)	545.204
2847	TP2833	660867.718	3008967.218	88° 37' 26.657" E	27° 11' 38.474" N	16.84	152490.81	26°21'5"(R)	545.204
2848	TP2834	660853.653	3008957.952	88° 37' 26.142" E	27° 11' 38.179" N	37.86	152507.66	5°21'57"(R)	543.799
2849	TP2835	660824.123	3008934.259	88° 37' 25.057" E	27° 11' 37.421" N	66.66	152545.52	11°14'12"(L)	541.846
2850	TP2836	660764.994	3008903.472	88° 37' 22.895" E	27° 11' 36.446" N	27.21	152612.18	8°54'48"(L)	539.424
2851	TP2837	660739.204	3008894.797	88° 37' 21.954" E	27° 11' 36.175" N	42.28	152639.39	32°19'37"(L)	537.002
2852	TP2838	660698.137	3008904.835	88° 37' 20.466" E	27° 11' 36.518" N	81.33	152681.67	17°8'43"(R)	537.800
2853	TP2839	660616.954	3008899.998	88° 37' 17.514" E	27° 11' 36.395" N	11.30	152762.99	84°18'5"(L)	537.114
2854	TP2840	660615.165	3008911.157	88° 37' 17.455" E	27° 11' 36.759" N	14.94	152774.29	5°54'43"(R)	535.367
2855	TP2841	660617.648	3008925.894	88° 37' 17.552" E	27° 11' 37.236" N	21.82	152789.24	88°7'36"(L)	534.192
2856	TP2842	660639.277	3008922.973	88° 37' 18.336" E	27° 11' 37.132" N	66.31	152811.06	9°55'26"(R)	532.992
2857	TP2843	660705.532	3008925.557	88° 37' 20.745" E	27° 11' 37.189" N	44.23	152877.37	8°17'57"(L)	530.805
2858	TP2844	660749.516	3008920.883	88° 37' 22.341" E	27° 11' 37.018" N	9.92	152921.60	33°54'21"(R)	527.637
2859	TP2845	660758.284	3008925.513	88° 37' 22.661" E	27° 11' 37.165" N	35.51	152931.52	28°10'4"(R)	527.211
2860	TP2846	660778.137	3008954.957	88° 37' 23.396" E	27° 11' 38.113" N	19.69	152967.03	18°13'10"(L)	524.806
2861	TP2847	660793.697	3008967.020	88° 37' 23.967" E	27° 11' 38.499" N	32.01	152986.72	13°41'49"(L)	523.200
2862	TP2848	660822.917	3008980.086	88° 37' 25.035" E	27° 11' 38.911" N	26.42	153018.72	14°19'46"(R)	521.692
2863	TP2849	660843.613	3008996.502	88° 37' 25.795" E	27° 11' 39.435" N	11.74	153045.14	87°16'52"(R)	520.256
2864	TP2850	660836.764	3009006.033	88° 37' 25.551" E	27° 11' 39.748" N	12.17	153056.88	11°0'33"(L)	518.894
2865	TP2851	660828.586	3009015.052	88° 37' 25.258" E	27° 11' 40.044" N	33.66	153069.05	85°20'23"(R)	516.748
2866	TP2852	660801.897	3008994.544	88° 37' 24.278" E	27° 11' 39.389" N	28.79	153102.71	7°38'16"(L)	515.597
2867	TP2853	660776.941	3008980.193	88° 37' 23.365" E	27° 11' 38.934" N	55.12	153131.50	14°2'16"(L)	514.303
2868	TP2854	660723.919	3008965.126	88° 37' 21.431" E	27° 11' 38.466" N	18.30	153186.62	9°29'39"(L)	512.179
2869	TP2855	660705.733	3008963.096	88° 37' 20.770" E	27° 11' 38.408" N	40.44	153204.92	30°2'12"(L)	509.899
2870	TP2856	660668.696	3008979.329	88° 37' 19.432" E	27° 11' 38.951" N	33.15	153245.36	21°50'12"(R)	507.402
2871	TP2857	660635.563	3008980.388	88° 37' 18.228" E	27° 11' 38.999" N	81.11	153278.51	15°11'47"(R)	506.142
2872	TP2858	660556.650	3008961.638	88° 37' 15.352" E	27° 11' 38.423" N	24.86	153359.62	5°45'27"(L)	502.408
2873	TP2859	660532.012	3008958.347	88° 37' 14.456" E	27° 11' 38.327" N	94.14	153384.47	31°54'15"(L)	501.702
2874	TP2860	660446.213	3008997.079	88° 37' 11.357" E	27° 11' 39.621" N	68.47	153478.61	15°23'19"(R)	499.891
2875	TP2861	660378.570	3009007.681	88° 37' 8.904" E	27° 11' 39.994" N	61.59	153547.08	18°20'54"(R)	499.300
2876	TP2862	660317.812	3008997.578	88° 37' 6.692" E	27° 11' 39.691" N	45.10	153608.67	22°29'15"(L)	500.057
2877	TP2863	660273.872	3009007.760	88° 37' 5.100" E	27° 11' 40.041" N	60.35	153653.77	19°59'22"(L)	500.846
2878	TP2864	660223.277	3009040.662	88° 37' 3.277" E	27° 11' 41.131" N	32.20	153714.13	33°10'19"(R)	501.207
2879	TP2865	660191.078	3009040.586	88° 37' 2.107" E	27° 11' 41.142" N	33.35	153746.33	27°19'30"(R)	500.111
2880	TP2866	660161.484	3009025.206	88° 37' 1.025" E	27° 11' 40.654" N	31.53	153779.68	5°53'31"(L)	499.302
2881	TP2867	660132.158	3009013.613	88° 36' 59.954" E	27° 11' 40.290" N	38.72	153811.21	8°21'17"(L)	499.104
2882	TP2868	660094.464	3009004.762	88° 36' 58.580" E	27° 11' 40.018" N	67.25	153849.93	10°59'50"(R)	497.952
2883	TP2869	660033.131	3008977.183	88° 36' 56.339" E	27° 11' 39.148" N	57.55	153917.18	0°48'57"(L)	499.210
2884	TP2870	659980.312	3008954.331	88° 36' 54.409" E	27° 11' 38.428" N	64.64	153974.73	4°31'11"(L)	498.682
2885	TP2871	659919.149	3008933.419	88° 36' 52.177" E	27° 11' 37.774" N	83.74	154039.37	3°30'53"(L)	496.958
2886	TP2872	659838.403	3008911.237	88° 36' 49.233" E	27° 11' 37.087" N	66.74	154123.11	5°25'53"(L)	496.711
2887	TP2873	659772.663	3008899.728	88° 36' 46.839" E	27° 11' 36.741" N	37.90	154189.85	19°19'44"(R)	494.367
2888	TP2874	659739.596	3008881.203	88° 36' 45.629" E	27° 11' 36.153" N	28.92	154227.75	24°55'59"(L)	493.869
2889	TP2875	659710.762	3008879.022	88° 36' 44.580" E	27° 11' 36.094" N	59.79	154256.67	19°54'7"(L)	493.157
2890	TP2876	659653.164	3008895.078	88° 36' 42.495" E	27° 11' 36.639" N	54.09	154316.46	22°27'25"(R)	490.675
2891	TP2877	659599.464	3008888.598	88° 36' 40.541" E	27° 11' 36.451" N	88.57	154370.55	7°23'11"(L)	487.969
2892	TP2878	659510.893	3008889.380	88° 36' 37.323" E	27° 11' 36.514" N	46.71	154459.12	6°46'21"(L)	483.584
2893	TP2879	659464.564	3008895.297	88° 36' 35.643" E	27° 11' 36.725" N	79.06	154505.83	12°55'10"(L)	482.698
2894	TP2880	659390.361	3008922.595	88° 36' 32.959" E	27° 11' 37.643" N	59.18	154584.89	7°49'55"(L)	478.918
2895	TP2881	659338.125	3008950.404	88° 36' 31.075" E	27° 11' 38.568" N	60.01	154644.07	4°13'38"(L)	475.568
2896	TP2882	659287.377	3008982.432	88° 36' 29.246" E	27° 11' 39.630" N	44.02	154704.08	9°1'7"(L)	472.372
2897	TP2883	659254.295	3009011.470	88° 36' 28.057" E	27° 11' 40.587" N	28.52	154748.10	42°30'38"(L)	470.731
2898	TP2884	659251.208	3009039.821	88° 36' 27.958" E	27° 11' 41.510" N	30.84	154776.62	28°41'21"(L)	470.432
2899	TP2885	659262.996	3009068.315	88° 36' 28.400" E	27° 11' 42.431" N	173.20	154807.45	11°5'23"(L)	469.952
2900	TP2886	659358.757	3009212.640	88° 36' 31.946" E	27° 11' 47.080" N	14.00	154980.66	50°21'3"(L)	469.992
2901	TP2887	659372.679	3009214.124	88° 36' 32.453" E	27° 11' 47.122" N	45.17	154994.66	46°46'28"(L)	470.152
2902	TP2888	659406.932	3009184.672	88° 36' 33.684" E	27° 11' 46.151" N	21.37	155039.83	1°58'14"(R)	469.935
2903	TP2889	659423.605	3009171.305	88° 36' 34.283" E	27° 11' 45.710" N	18.58	155061.20	29°6'17"(R)	471.438
2904	TP2890	659441.928	3009168.201	88° 36' 34.948" E	27° 11' 45.601" N	26.23	155079.79	12°1'37"(R)	473.026

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
2905	TP2891	659468.138	3009169.305	88° 36' 35.900" E	27° 11' 45.626" N	35.12	155106.02	15°58'24"(R)	474.254
2906	TP2892	659501.463	3009180.381	88° 36' 37.116" E	27° 11' 45.972" N	4.18	155141.14	22°7'48"(L)	475.239
2907	TP2893	659505.524	3009179.399	88° 36' 37.264" E	27° 11' 45.938" N	27.34	155145.32	31°58'35"(L)	476.820
2908	TP2894	659527.718	3009163.439	88° 36' 38.063" E	27° 11' 45.411" N	20.74	155172.65	25°25'16"(L)	478.355
2909	TP2895	659537.727	3009145.277	88° 36' 38.418" E	27° 11' 44.816" N	21.21	155193.39	69°26'12"(R)	480.612
2910	TP2896	659558.716	3009148.338	88° 36' 39.182" E	27° 11' 44.907" N	23.97	155214.60	24°14'1"(R)	482.600
2911	TP2897	659578.928	3009161.228	88° 36' 39.922" E	27° 11' 45.317" N	11.64	155238.57	32°7'50"(R)	483.505
2912	TP2898	659583.909	3009171.747	88° 36' 40.108" E	27° 11' 45.657" N	31.91	155250.21	31°11'37"(R)	484.266
2913	TP2899	659580.656	3009203.487	88° 36' 40.005" E	27° 11' 46.690" N	35.13	155282.12	0°8'31"(R)	486.584
2914	TP2900	659576.987	3009238.429	88° 36' 39.888" E	27° 11' 47.826" N	33.89	155317.25	14°46'44"(L)	488.655
2915	TP2901	659582.163	3009271.927	88° 36' 40.091" E	27° 11' 48.913" N	32.96	155351.15	0°42'3"(R)	490.395
2916	TP2902	659586.798	3009304.561	88° 36' 40.275" E	27° 11' 49.971" N	21.48	155384.11	10°55'4"(L)	492.322
2917	TP2903	659593.792	3009324.872	88° 36' 40.539" E	27° 11' 50.628" N	9.58	155405.59	43°50'56"(R)	493.299
2918	TP2904	659589.766	3009333.566	88° 36' 40.396" E	27° 11' 50.912" N	13.18	155415.17	86°29'29"(R)	494.404
2919	TP2905	659577.493	3009328.771	88° 36' 39.948" E	27° 11' 50.761" N	6.89	155428.35	57°45'32"(L)	496.207
2920	TP2906	659571.950	3009332.861	88° 36' 39.749" E	27° 11' 50.897" N	13.40	155435.24	88°33'27"(R)	496.386
2921	TP2907	659563.724	3009322.279	88° 36' 39.445" E	27° 11' 50.556" N	36.72	155448.64	20°58'18"(L)	497.543
2922	TP2908	659532.304	3009303.276	88° 36' 38.294" E	27° 11' 49.952" N	11.77	155485.36	4°19'54"(R)	500.101
2923	TP2909	659522.718	3009296.439	88° 36' 37.943" E	27° 11' 49.734" N	39.35	155497.13	9°51'9"(R)	500.732
2924	TP2910	659495.063	3009268.444	88° 36' 36.925" E	27° 11' 48.836" N	16.69	155536.48	7°30'51"(R)	503.592
2925	TP2911	659484.989	3009255.141	88° 36' 36.553" E	27° 11' 48.408" N	32.47	155553.17	3°30'49"(R)	504.092
2926	TP2912	659467.012	3009228.106	88° 36' 35.887" E	27° 11' 47.537" N	20.79	155585.64	21°9'42"(L)	504.950
2927	TP2913	659450.024	3009216.115	88° 36' 35.264" E	27° 11' 47.155" N	25.85	155606.43	41°33'48"(L)	505.194
2928	TP2914	659424.329	3009218.973	88° 36' 34.332" E	27° 11' 47.258" N	26.82	155632.28	33°17'50"(L)	506.112
2929	TP2915	659403.674	3009236.087	88° 36' 33.589" E	27° 11' 47.823" N	86.17	155659.11	9°31'32"(R)	511.434
2930	TP2916	659329.140	3009279.325	88° 36' 30.901" E	27° 11' 49.259" N	32.84	155745.28	34°11'8"(L)	517.433
2931	TP2917	659314.899	3009308.921	88° 36' 30.398" E	27° 11' 50.226" N	37.68	155778.12	22°53'15"(R)	520.098
2932	TP2918	659286.639	3009333.850	88° 36' 29.383" E	27° 11' 51.048" N	26.38	155815.80	12°30'32"(R)	521.679
2933	TP2919	659263.547	3009346.601	88° 36' 28.550" E	27° 11' 51.472" N	18.43	155842.18	83°17'22"(L)	523.556
2934	TP2920	659270.511	3009363.668	88° 36' 28.811" E	27° 11' 52.023" N	23.34	155860.62	88°52'43"(L)	526.814
2935	TP2921	659290.709	3009351.966	88° 36' 29.539" E	27° 11' 51.635" N	26.15	155883.96	22°27'20"(R)	530.252
2936	TP2922	659316.629	3009348.493	88° 36' 30.479" E	27° 11' 51.511" N	12.20	155910.11	28°46'27"(L)	534.201
2937	TP2923	659326.448	3009341.253	88° 36' 30.833" E	27° 11' 51.272" N	89.58	155922.31	14°46'13"(L)	535.017
2938	TP2924	659382.608	3009271.466	88° 36' 32.841" E	27° 11' 48.981" N	19.04	156011.89	37°37'13"(R)	538.811
2939	TP2925	659401.114	3009267.004	88° 36' 33.511" E	27° 11' 48.828" N	33.45	156030.92	28°23'1"(R)	541.196
2940	TP2926	659433.451	3009275.565	88° 36' 34.690" E	27° 11' 49.093" N	54.07	156064.37	34°1'4"(R)	542.983
2941	TP2927	659469.032	3009316.275	88° 36' 36.002" E	27° 11' 50.401" N	82.39	156118.44	52°13'42"(R)	549.049
2942	TP2928	659453.206	3009397.132	88° 36' 35.464" E	27° 11' 53.034" N	37.05	156200.83	11°32'23"(L)	550.883
2943	TP2929	659453.507	3009434.185	88° 36' 35.493" E	27° 11' 54.238" N	19.43	156237.89	5°59'40"(R)	553.956
2944	TP2930	659451.635	3009453.524	88° 36' 35.434" E	27° 11' 54.867" N	14.49	156257.32	64°9'54"(R)	555.661
2945	TP2931	659437.185	3009454.645	88° 36' 34.909" E	27° 11' 54.910" N	35.92	156271.81	88°31'40"(R)	558.658
2946	TP2932	659433.487	3009418.911	88° 36' 34.758" E	27° 11' 53.750" N	24.86	156307.74	4°28'0"(L)	560.759
2947	TP2933	659429.011	3009394.461	88° 36' 34.584" E	27° 11' 52.958" N	36.11	156332.59	13°14'51"(R)	562.784
2948	TP2934	659430.821	3009358.399	88° 36' 34.633" E	27° 11' 51.785" N	33.62	156368.70	4°55'33"(L)	564.641
2949	TP2935	659429.617	3009324.802	88° 36' 34.573" E	27° 11' 50.694" N	16.01	156402.32	52°55'10"(L)	567.716
2950	TP2936	659416.506	3009315.612	88° 36' 34.093" E	27° 11' 50.401" N	20.60	156418.33	52°55'10"(L)	569.651
2951	TP2937	659395.960	3009317.091	88° 36' 33.347" E	27° 11' 50.458" N	23.90	156438.93	41°52'52"(L)	572.142
2952	TP2938	659379.354	3009334.286	88° 36' 32.752" E	27° 11' 51.023" N	17.14	156462.83	33°56'51"(L)	575.226
2953	TP2939	659376.362	3009351.161	88° 36' 32.651" E	27° 11' 51.573" N	23.78	156479.97	15°40'17"(R)	576.142
2954	TP2940	659366.038	3009372.588	88° 36' 32.286" E	27° 11' 52.273" N	24.89	156503.76	18°0'28"(R)	577.794
2955	TP2941	659348.830	3009390.574	88° 36' 31.669" E	27° 11' 52.865" N	37.33	156528.65	16°14'16"(L)	580.057
2956	TP2942	659331.594	3009423.690	88° 36' 31.058" E	27° 11' 53.948" N	98.59	156565.98	17°30'5"(R)	585.183
2957	TP2943	659261.887	3009493.404	88° 36' 28.558" E	27° 11' 56.242" N	35.00	156664.57	5°26'59"(R)	587.281
2958	TP2944	659234.898	3009515.694	88° 36' 27.587" E	27° 11' 56.977" N	20.86	156699.57	15°16'14"(R)	590.546
2959	TP2945	659215.882	3009524.273	88° 36' 26.901" E	27° 11' 57.264" N	35.98	156720.43	16°23'45"(R)	591.753
2960	TP2946	659180.245	3009529.209	88° 36' 25.608" E	27° 11' 57.439" N	19.33	156756.41	19°7'3"(L)	594.605
2961	TP2947	659163.025	3009537.985	88° 36' 24.986" E	27° 11' 57.731" N	49.29	156775.74	39°50'3"(L)	605.795
2962	TP2948	659149.723	3009585.444	88° 36' 24.525" E	27° 11' 59.279" N	18.73	156825.02	89°29'33"(L)	621.004
2963	TP2949	659167.819	3009590.278	88° 36' 25.185" E	27° 11' 59.428" N	37.58	156843.76	5°57'20"(L)	623.105
2964	TP2950	659204.843	3009596.722	88° 36' 26.533" E	27° 11' 59.622" N	43.55	156881.34	11°25'53"(L)	627.640
2965	TP2951	659248.376	3009595.538	88° 36' 28.114" E	27° 11' 59.566" N	30.35	156924.88	31°27'26"(L)	629.375
2966	TP2952	659273.823	3009579.003	88° 36' 29.031" E	27° 11' 59.018" N	27.94	156955.23	22°16'44"(L)	631.182
2967	TP2953	659289.731	3009556.034	88° 36' 29.599" E	27° 11' 58.265" N	68.48	156983.17	50°37'52"(R)	632.841
2968	TP2954	659357.983	3009550.467	88° 36' 32.076" E	27° 11' 58.056" N	52.69	157051.65	59°4'29"(R)	639.004
2969	TP2955	659388.648	3009593.318	88° 36' 33.210" E	27° 11' 59.435" N	29.18	157104.34	47°1'38"(R)	645.785
2970	TP2956	659382.861	3009621.918	88° 36' 33.013" E	27° 12' 0.367" N	53.81	157133.52	4°25'40"(L)	650.107

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S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
2971	TP2957	659376.293	3009675.324	88° 36' 32.799" E	27° 12' 2.105" N	36.43	157187.33	5°5'53"(L)	657.128
2972	TP2958	659375.077	3009711.729	88° 36' 32.772" E	27° 12' 3.288" N	32.44	157223.76	21°58'20"(R)	658.321
2973	TP2959	659361.943	3009741.388	88° 36' 32.309" E	27° 12' 4.257" N	28.38	157256.19	7°34'53"(R)	661.118
2974	TP2960	659347.130	3009765.592	88° 36' 31.782" E	27° 12' 5.049" N	57.43	157284.57	13°32'35"(L)	662.942
2975	TP2961	659329.455	3009820.237	88° 36' 31.165" E	27° 12' 6.832" N	26.76	157342.00	4°10'56"(L)	666.379
2976	TP2962	659323.099	3009846.228	88° 36' 30.946" E	27° 12' 7.679" N	36.52	157368.76	11°15'9"(L)	667.507
2977	TP2963	659321.513	3009882.712	88° 36' 30.906" E	27° 12' 8.865" N	35.47	157405.28	4°27'48"(L)	668.619
2978	TP2964	659322.735	3009918.165	88° 36' 30.967" E	27° 12' 10.017" N	35.98	157440.75	4°27'48"(L)	670.835
2979	TP2965	659321.308	3009954.121	88° 36' 30.932" E	27° 12' 11.185" N	50.10	157476.74	28°4'18"(L)	675.224
2980	TP2966	659343.112	3009999.227	88° 36' 31.745" E	27° 12' 12.642" N	22.80	157526.84	3°54'32"(L)	676.411
2981	TP2967	659354.411	3010019.031	88° 36' 32.165" E	27° 12' 13.280" N	68.63	157549.64	9°14'10"(R)	677.520
2982	TP2968	659378.415	3010083.328	88° 36' 33.067" E	27° 12' 15.359" N	30.94	157618.27	8°51'34"(R)	682.911
2983	TP2969	659384.643	3010113.633	88° 36' 33.307" E	27° 12' 16.341" N	34.70	157649.21	23°21'48"(R)	684.112
2984	TP2970	659377.577	3010147.603	88° 36' 33.067" E	27° 12' 17.448" N	30.85	157683.90	40°31'28"(L)	684.644
2985	TP2971	659392.426	3010174.643	88° 36' 33.619" E	27° 12' 18.320" N	14.10	157714.75	39°46'49"(L)	686.664
2986	TP2972	659405.548	3010179.798	88° 36' 34.098" E	27° 12' 18.482" N	26.62	157728.85	16°28'57"(R)	686.499
2987	TP2973	659426.542	3010196.158	88° 36' 34.868" E	27° 12' 19.005" N	44.15	157755.47	17°50'40"(R)	686.911
2988	TP2974	659451.373	3010232.659	88° 36' 35.788" E	27° 12' 20.181" N	17.49	157799.61	22°49'30"(R)	687.136
2989	TP2975	659454.831	3010249.804	88° 36' 35.921" E	27° 12' 20.736" N	32.74	157817.10	29°53'17"(R)	687.111
2990	TP2976	659444.450	3010280.852	88° 36' 35.559" E	27° 12' 21.749" N	54.08	157849.84	13°49'53"(L)	686.899
2991	TP2977	659440.062	3010334.749	88° 36' 35.424" E	27° 12' 23.502" N	52.67	157903.92	5°19'42"(L)	686.423
2992	TP2978	659440.681	3010387.415	88° 36' 35.471" E	27° 12' 25.213" N	62.27	157956.59	16°48'13"(L)	684.326
2993	TP2979	659459.381	3010446.807	88° 36' 36.179" E	27° 12' 27.135" N	21.51	158018.85	85°43'11"(R)	690.234
2994	TP2980	659438.955	3010453.537	88° 36' 35.440" E	27° 12' 27.362" N	29.03	158040.36	86°38'23"(R)	692.503
2995	TP2981	659428.270	3010426.546	88° 36' 35.039" E	27° 12' 26.489" N	38.76	158069.39	11°8'1"(L)	693.930
2996	TP2982	659407.310	3010393.936	88° 36' 34.262" E	27° 12' 25.439" N	54.94	158108.15	27°4'30"(R)	695.889
2997	TP2983	659401.896	3010339.268	88° 36' 34.040" E	27° 12' 23.665" N	62.44	158163.09	10°17'27"(R)	698.831
2998	TP2984	659406.942	3010277.029	88° 36' 34.194" E	27° 12' 21.641" N	20.10	158225.53	15°31'18"(L)	704.079
2999	TP2985	659403.146	3010257.295	88° 36' 34.047" E	27° 12' 21.001" N	25.26	158245.63	28°35'59"(L)	705.462
3000	TP2986	659387.081	3010237.797	88° 36' 33.454" E	27° 12' 20.374" N	27.26	158270.89	26°34'49"(L)	707.492
3001	TP2987	659362.166	3010226.739	88° 36' 32.543" E	27° 12' 20.025" N	30.63	158298.15	4°23'54"(L)	707.903
3002	TP2988	659333.299	3010216.497	88° 36' 31.490" E	27° 12' 19.705" N	24.55	158328.78	4°23'54"(L)	710.322
3003	TP2989	659320.687	3010195.436	88° 36' 31.022" E	27° 12' 19.026" N	21.29	158353.33	52°32'20"(R)	710.942
3004	TP2990	659328.532	3010175.647	88° 36' 31.297" E	27° 12' 18.380" N	24.24	158374.62	11°18'35"(L)	711.346
3005	TP2991	659332.873	3010151.796	88° 36' 31.444" E	27° 12' 17.603" N	31.08	158398.86	21°7'43"(L)	711.672
3006	TP2992	659327.042	3010121.268	88° 36' 31.218" E	27° 12' 16.613" N	89.19	158429.94	14°8'57"(L)	713.277
3007	TP2993	659289.401	3010040.408	88° 36' 29.813" E	27° 12' 14.002" N	31.45	158519.13	17°19'28"(L)	716.922
3008	TP2994	659268.242	3010017.145	88° 36' 29.033" E	27° 12' 13.255" N	51.92	158550.58	22°15'14"(R)	718.333
3009	TP2995	659250.457	3009968.368	88° 36' 28.364" E	27° 12' 11.678" N	34.42	158602.50	4°15'5"(R)	721.652
3010	TP2996	659241.097	3009935.250	88° 36' 28.008" E	27° 12' 10.606" N	67.83	158636.91	10°24'47"(L)	722.945
3011	TP2997	659211.154	3009874.384	88° 36' 26.892" E	27° 12' 8.641" N	24.71	158704.74	16°45'54"(R)	728.705
3012	TP2998	659207.106	3009850.011	88° 36' 26.733" E	27° 12' 7.851" N	35.17	158729.45	1°9'44"(L)	731.152
3013	TP2999	659200.642	3009815.443	88° 36' 26.482" E	27° 12' 6.730" N	43.99	158764.62	8°37'10"(L)	733.482
3014	TP3000	659186.166	3009773.904	88° 36' 25.937" E	27° 12' 5.387" N	35.54	158808.61	10°15'21"(L)	737.527
3015	TP3001	659180.634	3009738.795	88° 36' 25.720" E	27° 12' 4.248" N	31.09	158844.15	2°42'40"(L)	739.879
3016	TP3002	659177.252	3009707.894	88° 36' 25.583" E	27° 12' 3.246" N	8.26	158875.23	85°20'2"(R)	741.210
3017	TP3003	659168.993	3009708.122	88° 36' 25.283" E	27° 12' 3.257" N	11.64	158883.50	13°26'52"(L)	745.512
3018	TP3004	659157.801	3009711.320	88° 36' 24.877" E	27° 12' 3.365" N	67.29	158895.14	81°47'26"(R)	746.861
3019	TP3005	659166.861	3009777.999	88° 36' 25.238" E	27° 12' 5.528" N	36.38	158962.43	1°49'50"(L)	750.257
3020	TP3006	659170.606	3009814.190	88° 36' 25.391" E	27° 12' 6.702" N	32.48	158998.81	4°16'17"(L)	752.832
3021	TP3007	659171.533	3009846.661	88° 36' 25.439" E	27° 12' 7.757" N	34.58	159031.30	3°50'36"(L)	755.095
3022	TP3008	659170.201	3009881.215	88° 36' 25.407" E	27° 12' 8.880" N	33.28	159065.87	8°53'49"(R)	755.894
3023	TP3009	659174.078	3009914.271	88° 36' 25.563" E	27° 12' 9.952" N	27.36	159099.16	9°33'8"(R)	757.334
3024	TP3010	659181.730	3009940.538	88° 36' 25.854" E	27° 12' 10.802" N	54.32	159126.52	7°58'30"(L)	757.517
3025	TP3011	659189.540	3009994.293	88° 36' 26.162" E	27° 12' 12.545" N	33.65	159180.84	12°22'52"(R)	757.934
3026	TP3012	659201.405	3010025.779	88° 36' 26.608" E	27° 12' 13.563" N	32.13	159214.48	2°4'49"(L)	757.351
3027	TP3013	659211.634	3010056.232	88° 36' 26.994" E	27° 12' 14.549" N	26.86	159246.61	0°20'47"(R)	757.743
3028	TP3014	659220.340	3010081.641	88° 36' 27.322" E	27° 12' 15.371" N	36.48	159273.47	3°36'49"(L)	759.376
3029	TP3015	659229.967	3010116.829	88° 36' 27.689" E	27° 12' 16.510" N	16.93	159309.95	2°27'33"(R)	761.982
3030	TP3016	659235.130	3010132.950	88° 36' 27.884" E	27° 12' 17.031" N	26.41	159326.88	26°56'48"(L)	762.852
3031	TP3017	659230.914	3010159.017	88° 36' 27.743" E	27° 12' 17.880" N	90.40	159353.28	10°46'40"(L)	764.614
3032	TP3018	659200.047	3010243.987	88° 36' 26.661" E	27° 12' 20.653" N	21.87	159443.69	43°19'31"(R)	769.039
3033	TP3019	659208.719	3010264.066	88° 36' 26.985" E	27° 12' 21.302" N	41.26	159465.56	38°30'11"(R)	769.345
3034	TP3020	659245.107	3010283.525	88° 36' 28.316" E	27° 12' 21.919" N	35.01	159506.82	19°18'57"(L)	767.732
3035	TP3021	659268.779	3010309.315	88° 36' 29.189" E	27° 12' 22.747" N	29.49	159541.83	23°47'22"(L)	767.553
3036	TP3022	659278.261	3010337.236	88° 36' 29.546" E	27° 12' 23.650" N	24.77	159571.31	15°32'26"(L)	767.451

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
3037	TP3023	659279.652	3010361.969	88° 36' 29.608" E	27° 12' 24.453" N	35.72	159596.09	21°12'2"(L)	767.921
3038	TP3024	659268.623	3010395.947	88° 36' 29.223" E	27° 12' 25.562" N	55.82	159631.81	11°46'47"(R)	769.827
3039	TP3025	659262.591	3010451.442	88° 36' 29.030" E	27° 12' 27.367" N	44.55	159687.63	32°39'58"(R)	771.580
3040	TP3026	659282.444	3010491.325	88° 36' 29.770" E	27° 12' 28.655" N	122.54	159732.18	7°42'19"(L)	770.682
3041	TP3027	659321.849	3010607.355	88° 36' 31.256" E	27° 12' 32.408" N	24.70	159854.72	0°38'4"(L)	772.993
3042	TP3028	659329.531	3010630.827	88° 36' 31.546" E	27° 12' 33.168" N	41.60	159879.42	24°43'14"(L)	774.086
3043	TP3029	659324.752	3010672.148	88° 36' 31.392" E	27° 12' 34.512" N	13.25	159921.01	2°10'39"®	778.090
3044	TP3030	659323.731	3010685.356	88° 36' 31.361" E	27° 12' 34.942" N	48.71	159934.26	23°38'23"(R)	778.982
3045	TP3031	659339.765	3010731.349	88° 36' 31.965" E	27° 12' 36.429" N	36.27	159982.97	18°12'1"(R)	782.899
3046	TP3032	659361.803	3010760.153	88° 36' 32.779" E	27° 12' 37.356" N	33.95	160019.24	8°46'40"(R)	785.875
3047	TP3033	659386.309	3010783.655	88° 36' 33.681" E	27° 12' 38.109" N	23.36	160053.19	10°34'40"(L)	788.243
3048	TP3034	659399.913	3010802.642	88° 36' 34.184" E	27° 12' 38.720" N	22.67	160076.55	28°23'25"(L)	789.816
3049	TP3035	659402.765	3010825.128	88° 36' 34.298" E	27° 12' 39.450" N	41.08	160099.22	17°21'9"(L)	791.341
3050	TP3036	659395.546	3010865.566	88° 36' 34.055" E	27° 12' 40.766" N	61.88	160140.29	0°9'20"(R)	793.241
3051	TP3037	659384.835	3010926.517	88° 36' 33.694" E	27° 12' 42.751" N	31.12	160202.18	3°35'27"(R)	795.628
3052	TP3038	659381.378	3010957.444	88° 36' 33.583" E	27° 12' 43.757" N	69.65	160233.30	4°38'5"(L)	796.589
3053	TP3039	659368.075	3011025.815	88° 36' 33.131" E	27° 12' 45.984" N	34.44	160302.95	33°24'24"(L)	798.502
3054	TP3040	659343.973	3011050.412	88° 36' 32.267" E	27° 12' 46.793" N	36.26	160337.39	16°48'14"(R)	798.620
3055	TP3041	659327.164	3011082.546	88° 36' 31.671" E	27° 12' 47.844" N	23.78	160373.65	19°2'30"(R)	802.101
3056	TP3042	659323.619	3011106.064	88° 36' 31.553" E	27° 12' 48.610" N	58.53	160397.44	22°17'2"(L)	803.142
3057	TP3043	659293.601	3011156.308	88° 36' 30.486" E	27° 12' 50.255" N	18.99	160455.96	3°2'36"(L)	806.999
3058	TP3044	659283.008	3011172.073	88° 36' 30.108" E	27° 12' 50.772" N	22.08	160474.96	88°15'8"(L)	808.578
3059	TP3045	659264.315	3011160.323	88° 36' 29.423" E	27° 12' 50.398" N	11.09	160497.04	15°12'10"(R)	810.473
3060	TP3046	659254.785	3011154.653	88° 36' 29.074" E	27° 12' 50.217" N	31.45	160508.13	87°44'12"(L)	812.432
3061	TP3047	659269.808	3011127.018	88° 36' 29.607" E	27° 12' 49.313" N	29.99	160539.58	7°4'0"(R)	814.530
3062	TP3048	659280.779	3011099.111	88° 36' 29.993" E	27° 12' 48.402" N	31.85	160569.57	7°48'1"(R)	816.654
3063	TP3049	659288.303	3011068.159	88° 36' 30.252" E	27° 12' 47.393" N	26.75	160601.42	3°28'24"	818.987
3064	TP3050	659293.034	3011041.834	88° 36' 30.412" E	27° 12' 46.536" N	27.39	160628.17	6°54'56"(R)	821.162
3065	TP3051	659294.598	3011014.493	88° 36' 30.456" E	27° 12' 45.647" N	55.27	160655.55	24°20'18" (L)	823.011
3066	TP3052	659320.214	3010965.519	88° 36' 31.364" E	27° 12' 44.045" N	29.22	160710.82	5°33'34"(R)	825.219
3067	TP3053	659331.186	3010938.433	88° 36' 31.750" E	27° 12' 43.161" N	39.56	160740.04	13°52'21"(R)	826.581
3068	TP3054	659336.815	3010899.274	88° 36' 31.936" E	27° 12' 41.886" N	28.08	160779.61	10°40'54"(R)	828.284
3069	TP3055	659335.589	3010871.224	88° 36' 31.879" E	27° 12' 40.975" N	5.74	160807.68	15°0'0"(R)	829.631
3070	TP3056	659333.862	3010865.746	88° 36' 31.813" E	27° 12' 40.798" N	14.66	160813.43	84°55'43"(R)	830.253
3071	TP3057	659319.543	3010868.902	88° 36' 31.294" E	27° 12' 40.907" N	13.90	160828.09	61°2'42"(R)	831.156
3072	TP3058	659315.589	3010882.229	88° 36' 31.157" E	27° 12' 41.341" N	10.53	160841.99	62°27'21"(L)	832.450
3073	TP3059	659305.652	3010885.720	88° 36' 30.797" E	27° 12' 41.459" N	29.38	160852.52	83°46'24"(R)	832.414
3074	TP3060	659312.325	3010914.335	88° 36' 31.053" E	27° 12' 42.386" N	46.94	160881.91	47°22'9"(L)	833.341
3075	TP3061	659285.912	3010953.139	88° 36' 30.112" E	27° 12' 43.657" N	19.23	160928.85	59°53'37"(L)	836.790
3076	TP3062	659266.728	3010951.752	88° 36' 29.414" E	27° 12' 43.620" N	13.91	160948.08	23°47'11"(R)	837.853
3077	TP3063	659252.866	3010952.919	88° 36' 28.911" E	27° 12' 43.664" N	29.93	160961.99	86°0'43"(L)	840.549
3078	TP3064	659248.287	3010923.341	88° 36' 28.730" E	27° 12' 42.705" N	44.14	160991.92	10°15'10"(R)	842.760
3079	TP3065	659233.879	3010881.623	88° 36' 28.187" E	27° 12' 41.356" N	42.79	161036.06	17°38'41"(L)	845.352
3080	TP3066	659232.827	3010838.845	88° 36' 28.129" E	27° 12' 39.966" N	39.32	161078.85	9°42'56"(L)	847.501
3081	TP3067	659238.508	3010799.936	88° 36' 28.317" E	27° 12' 38.700" N	21.75	161118.17	85°56'10"R	849.363
3082	TP3068	659217.261	3010795.276	88° 36' 27.543" E	27° 12' 38.557" N	16.24	161139.92	3°21'43"(L)	852.667
3083	TP3069	659201.154	3010797.361	88° 36' 26.959" E	27° 12' 38.632" N	59.47	161156.16	78°18'2"(R)	854.012
3084	TP3070	659196.671	3010856.664	88° 36' 26.824" E	27° 12' 40.560" N	45.18	161215.64	16°47'26"(R)	855.566
3085	TP3071	659206.426	3010900.783	88° 36' 27.199" E	27° 12' 41.990" N	33.13	161260.82	7°54'30"(R)	857.663
3086	TP3072	659217.962	3010931.842	88° 36' 27.632" E	27° 12' 42.994" N	9.01	161293.95	16°44'35"(L)	859.074
3087	TP3073	659218.533	3010940.835	88° 36' 27.657" E	27° 12' 43.286" N	15.46	161302.96	87°25'28"(L)	859.457
3088	TP3074	659203.162	3010942.507	88° 36' 27.100" E	27° 12' 43.346" N	15.75	161318.43	1°20'3"(R)	861.260
3089	TP3075	659187.737	3010945.685	88° 36' 26.541" E	27° 12' 43.456" N	38.22	161334.17	86°35'42"(L)	862.412
3090	TP3076	659183.967	3010907.651	88° 36' 26.386" E	27° 12' 42.222" N	28.45	161372.39	15°38'31"(R)	862.942
3091	TP3077	659173.667	3010881.130	88° 36' 25.999" E	27° 12' 41.365" N	35.76	161400.85	3°1'40"(L)	864.243
3092	TP3078	659162.500	3010847.160	88° 36' 25.577" E	27° 12' 40.266" N	38.72	161436.60	2°21'10"(R)	865.417
3093	TP3079	659148.910	3010810.907	88° 36' 25.067" E	27° 12' 39.094" N	25.68	161475.32	8°31'21"(L)	867.419
3094	TP3080	659143.558	3010785.786	88° 36' 24.861" E	27° 12' 38.280" N	17.53	161501.01	6°54'53"(L)	868.641
3095	TP3081	659141.996	3010768.328	88° 36' 24.796" E	27° 12' 37.713" N	43.03	161518.53	16°19'54"(L)	869.513
3096	TP3082	659150.368	3010726.117	88° 36' 25.080" E	27° 12' 36.338" N	69.58	161561.57	38°10'1"(R)	870.534
3097	TP3083	659118.836	3010664.094	88° 36' 23.905" E	27° 12' 34.336" N	54.14	161631.14	5°28'26"(L)	874.527
3098	TP3084	659099.017	3010613.713	88° 36' 23.162" E	27° 12' 32.708" N	29.21	161685.28	7°49'33"(L)	877.115
3099	TP3085	659092.124	3010585.326	88° 36' 22.898" E	27° 12' 31.788" N	49.49	161714.50	9°25'23"(R)	877.751
3100	TP3086	659072.732	3010539.799	88° 36' 22.172" E	27° 12' 30.317" N	12.91	161763.98	6°9'8"(R)	879.288
3101	TP3087	659066.429	3010528.532	88° 36' 21.938" E	27° 12' 29.954" N	120.95	161776.89	19°23'31"(L)	879.730
3102	TP3088	659045.777	3010409.361	88° 36' 21.132" E	27° 12' 26.091" N	56.99	161897.84	54°34'14"(R)	880.672

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
3103	TP3089	658994.378	3010384.737	88° 36' 19.253" E	27° 12' 25.312" N	13.95	161954.83	6°16'48"(L)	884.208
3104	TP3090	658982.529	3010377.368	88° 36' 18.819" E	27° 12' 25.078" N	25.69	161968.78	20°41'15"(L)	883.321
3105	TP3091	658966.911	3010356.966	88° 36' 18.242" E	27° 12' 24.421" N	39.91	161994.48	11°22'13"(L)	884.456
3106	TP3092	658949.374	3010321.112	88° 36' 17.588" E	27° 12' 23.264" N	36.47	162034.39	2°24'7"(L)	886.469
3107	TP3093	658934.735	3010287.704	88° 36' 17.040" E	27° 12' 22.184" N	42.16	162070.87	24°5'19"(L)	888.283
3108	TP3094	658935.049	3010245.547	88° 36' 17.032" E	27° 12' 20.815" N	35.86	162113.02	17°5'39"(L)	889.753
3109	TP3095	658945.844	3010211.351	88° 36' 17.409" E	27° 12' 19.699" N	21.84	162148.88	9°38'5"(R)	889.879
3110	TP3096	658948.840	3010189.722	88° 36' 17.507" E	27° 12' 18.995" N	64.14	162170.72	14°29'34"(R)	890.649
3111	TP3097	658941.459	3010126.004	88° 36' 17.209" E	27° 12' 16.928" N	37.51	162234.86	8°40'45"(R)	893.639
3112	TP3098	658931.571	3010089.825	88° 36' 16.833" E	27° 12' 15.757" N	35.88	162272.37	22°28'2"(R)	896.637
3113	TP3099	658909.601	3010061.454	88° 36' 16.022" E	27° 12' 14.844" N	45.52	162308.25	7°51'58"(R)	899.251
3114	TP3100	658877.071	3010029.620	88° 36' 14.825" E	27° 12' 13.823" N	12.41	162353.77	12°46'28"(R)	902.589
3115	TP3101	658866.498	3010023.114	88° 36' 14.438" E	27° 12' 13.616" N	27.34	162366.18	77°34'3"(R)	903.537
3116	TP3102	658849.681	3010044.671	88° 36' 13.837" E	27° 12' 14.324" N	38.69	162393.52	86°33'5"(R)	903.138
3117	TP3103	658878.698	3010070.260	88° 36' 14.903" E	27° 12' 15.143" N	68.36	162432.21	32°17'39"(L)	906.404
3118	TP3104	658897.883	3010135.875	88° 36' 15.631" E	27° 12' 17.267" N	48.97	162500.57	6°45'59"(L)	907.816
3119	TP3105	658905.992	3010184.168	88° 36' 15.948" E	27° 12' 18.832" N	61.19	162549.54	16°38'58"(L)	909.403
3120	TP3106	658898.410	3010244.887	88° 36' 15.701" E	27° 12' 20.808" N	61.09	162610.73	14°55'18"(L)	911.186
3121	TP3107	658875.487	3010301.510	88° 36' 14.894" E	27° 12' 22.657" N	29.69	162671.82	1°20'31"(L)	913.109
3122	TP3108	658863.707	3010328.758	88° 36' 14.479" E	27° 12' 23.548" N	18.35	162701.51	3°58'36"(R)	913.627
3123	TP3109	658857.610	3010346.066	88° 36' 14.265" E	27° 12' 24.113" N	16.22	162719.86	2°29'21"(L)	914.334
3124	TP3110	658851.563	3010361.113	88° 36' 14.052" E	27° 12' 24.604" N	32.11	162736.07	26°45'22"(R)	917.106
3125	TP3111	658854.284	3010393.105	88° 36' 14.166" E	27° 12' 25.642" N	30.32	162768.18	9°7'51"(R)	916.746
3126	TP3112	658861.616	3010422.524	88° 36' 14.446" E	27° 12' 26.595" N	29.16	162798.50	15°47'52"(R)	918.553
3127	TP3113	658876.105	3010447.833	88° 36' 14.984" E	27° 12' 27.411" N	39.02	162827.66	11°15'52"(R)	920.447
3128	TP3114	658901.733	3010477.257	88° 36' 15.929" E	27° 12' 28.356" N	29.59	162866.68	14°9'44"(L)	922.935
3129	TP3115	658915.116	3010503.644	88° 36' 16.428" E	27° 12' 29.208" N	18.56	162896.27	16°21'5"(L)	925.707
3130	TP3116	658918.512	3010521.893	88° 36' 16.560" E	27° 12' 29.800" N	37.19	162914.83	17°43'45"(L)	926.581
3131	TP3117	658913.859	3010558.793	88° 36' 16.408" E	27° 12' 31.000" N	40.15	162952.02	8°54'42"(R)	928.997
3132	TP3118	658915.067	3010598.924	88° 36' 16.471" E	27° 12' 32.304" N	51.76	162992.17	12°46'7"(R)	930.524
3133	TP3119	658928.020	3010649.035	88° 36' 16.965" E	27° 12' 33.926" N	46.79	163043.93	4°51'17"(L)	932.917
3134	TP3120	658935.854	3010695.163	88° 36' 17.271" E	27° 12' 35.422" N	46.54	163090.72	13°27'15"(R)	934.618
3135	TP3121	658954.107	3010737.972	88° 36' 17.954" E	27° 12' 36.805" N	72.13	163137.26	24°12'20"(L)	935.082
3136	TP3122	658952.706	3010810.086	88° 36' 17.937" E	27° 12' 39.149" N	51.98	163209.38	21°52'59"(R)	937.360
3137	TP3123	658971.139	3010858.688	88° 36' 18.629" E	27° 12' 40.720" N	72.97	163261.36	17°21'0"(L)	939.217
3138	TP3124	658975.492	3010931.529	88° 36' 18.821" E	27° 12' 43.085" N	22.80	163334.34	19°53'59"(L)	943.853
3139	TP3125	658969.024	3010953.393	88° 36' 18.596" E	27° 12' 43.798" N	33.03	163357.14	88°38'36"(L)	945.330
3140	TP3126	658937.136	3010944.775	88° 36' 17.433" E	27° 12' 43.531" N	34.98	163390.17	85°21'42"(L)	947.509
3141	TP3127	658943.501	3010910.380	88° 36' 17.649" E	27° 12' 42.411" N	31.73	163425.15	11°21'22"(R)	948.099
3142	TP3128	658943.018	3010878.652	88° 36' 17.616" E	27° 12' 41.380" N	34.47	163456.88	41°34'22"(R)	949.290
3143	TP3129	658919.755	3010853.215	88° 36' 16.759" E	27° 12' 40.564" N	39.35	163491.35	9°55'0"(R)	951.193
3144	TP3130	658888.595	3010829.185	88° 36' 15.616" E	27° 12' 39.796" N	39.14	163530.70	28°57'45"(L)	953.218
3145	TP3131	658873.050	3010793.260	88° 36' 15.034" E	27° 12' 38.635" N	37.93	163569.84	27°2'57"(L)	954.729
3146	TP3132	658875.465	3010755.408	88° 36' 15.104" E	27° 12' 37.404" N	68.88	163607.77	20°4'3"R	955.186
3147	TP3133	658855.997	3010689.333	88° 36' 14.366" E	27° 12' 35.266" N	78.93	163676.66	6°47'28"(R)	957.217
3148	TP3134	658824.892	3010616.787	88° 36' 13.202" E	27° 12' 32.922" N	52.89	163755.59	5°38'54"(L)	961.987
3149	TP3135	658808.937	3010566.366	88° 36' 12.599" E	27° 12' 31.290" N	29.64	163808.47	8°7'45"(L)	965.732
3150	TP3136	658804.081	3010537.131	88° 36' 12.409" E	27° 12' 30.342" N	42.65	163838.11	29°24'35"(R)	966.749
3151	TP3137	658777.333	3010503.911	88° 36' 11.421" E	27° 12' 29.274" N	59.80	163880.76	22°21'15"(L)	970.185
3152	TP3138	658760.364	3010446.573	88° 36' 10.778" E	27° 12' 27.418" N	35.63	163940.56	1°3'58"(L)	971.162
3153	TP3139	658750.891	3010412.228	88° 36' 10.418" E	27° 12' 26.306" N	70.52	163976.18	13°1'50"(L)	972.894
3154	TP3140	658747.951	3010341.768	88° 36' 10.278" E	27° 12' 24.018" N	59.03	164046.70	15°13'35"(R)	974.112
3155	TP3141	658730.088	3010285.510	88° 36' 9.603" E	27° 12' 22.198" N	40.19	164105.73	15°27'51"(R)	977.037
3156	TP3142	658708.153	3010251.836	88° 36' 8.790" E	27° 12' 21.113" N	65.89	164145.92	8°14'43"(L)	978.187
3157	TP3143	658680.477	3010192.035	88° 36' 7.757" E	27° 12' 19.182" N	48.92	164211.81	21°23'33"(R)	977.629
3158	TP3144	658645.150	3010158.190	88° 36' 6.458" E	27° 12' 18.097" N	53.53	164260.74	30°28'34"(R)	977.446
3159	TP3145	658593.052	3010145.878	88° 36' 4.559" E	27° 12' 17.718" N	42.73	164314.27	66°43'27"(L)	977.881
3160	TP3146	658585.646	3010103.791	88° 36' 4.270" E	27° 12' 16.354" N	22.13	164357.00	20°56'19"(L)	977.193
3161	TP3147	658589.854	3010082.062	88° 36' 4.413" E	27° 12' 15.646" N	56.49	164379.14	39°50'11"(R)	977.569
3162	TP3148	658562.574	3010032.598	88° 36' 3.399" E	27° 12' 14.051" N	44.26	164435.62	29°33'44"(L)	978.590
3163	TP3149	658563.103	3009988.341	88° 36' 3.397" E	27° 12' 12.613" N	15.82	164479.88	29°33'44"(L)	979.304
3164	TP3150	658551.389	3009977.708	88° 36' 2.967" E	27° 12' 12.272" N	9.67	164495.70	85°54'22"(R)	980.771
3165	TP3151	658541.734	3009977.194	88° 36' 2.616" E	27° 12' 12.259" N	31.05	164505.37	39°10'59"(R)	981.261
3166	TP3152	658537.874	3010008.002	88° 36' 2.490" E	27° 12' 13.262" N	28.31	164536.42	5°42'16"(L)	982.751
3167	TP3153	658531.579	3010035.607	88° 36' 2.274" E	27° 12' 14.161" N	28.96	164564.73	6°54'38"(L)	984.324
3168	TP3154	658521.790	3010062.861	88° 36' 1.931" E	27° 12' 15.051" N	39.55	164593.69	10°20'1"(R)	986.453

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
3169	TP3155	658515.316	3010101.873	88° 36' 1.714" E	27° 12' 16.321" N	43.94	164633.24	40°21'54"(R)	989.254
3170	TP3156	658537.909	3010139.560	88° 36' 2.552" E	27° 12' 17.536" N	31.70	164677.18	40°25'42"(L)	991.157
3171	TP3157	658532.685	3010170.823	88° 36' 2.377" E	27° 12' 18.554" N	31.41	164708.88	9°57'9"(R)	994.134
3172	TP3158	658532.941	3010202.234	88° 36' 2.401" E	27° 12' 19.574" N	31.67	164740.29	38°4'41"(R)	996.242
3173	TP3159	658552.677	3010227.006	88° 36' 3.129" E	27° 12' 20.371" N	61.17	164771.96	7°43'57"(R)	997.012
3174	TP3160	658596.884	3010269.285	88° 36' 4.755" E	27° 12' 21.726" N	73.91	164833.13	6°9'28"(L)	999.876
3175	TP3161	658644.511	3010325.805	88° 36' 6.512" E	27° 12' 23.543" N	43.07	164907.04	16°54'16"(R)	1003.523
3176	TP3162	658680.646	3010349.250	88° 36' 7.836" E	27° 12' 24.290" N	28.60	164950.12	34°20'24"(L)	1005.111
3177	TP3163	658691.676	3010375.639	88° 36' 8.249" E	27° 12' 25.142" N	33.30	164978.72	21°41'21"(L)	1006.638
3178	TP3164	658692.254	3010408.930	88° 36' 8.286" E	27° 12' 26.224" N	68.47	165012.01	11°29'27"(L)	1008.427
3179	TP3165	658679.781	3010476.254	88° 36' 7.864" E	27° 12' 28.416" N	36.76	165080.48	16°16'53"(R)	1011.243
3180	TP3166	658683.486	3010512.822	88° 36' 8.015" E	27° 12' 29.603" N	12.86	165117.24	14°12'58"(R)	1012.076
3181	TP3167	658687.886	3010524.909	88° 36' 8.181" E	27° 12' 29.994" N	30.90	165130.10	14°12'58"(R)	1012.248
3182	TP3168	658691.488	3010555.598	88° 36' 8.326" E	27° 12' 30.989" N	24.74	165161.00	3°7'45"(L)	1012.753
3183	TP3169	658693.026	3010580.288	88° 36' 8.393" E	27° 12' 31.791" N	32.95	165185.74	16°28'10"®	1013.737
3184	TP3170	658704.315	3010611.246	88° 36' 8.818" E	27° 12' 32.792" N	111.29	165218.69	21°22'49"(L)	1013.186
3185	TP3171	658701.702	3010722.502	88° 36' 8.775" E	27° 12' 36.407" N	68.26	165329.98	16°37'58"(R)	1016.419
3186	TP3172	658719.699	3010788.346	88° 36' 9.459" E	27° 12' 38.539" N	70.51	165398.24	10°22'49"(L)	1019.723
3187	TP3173	658725.730	3010858.597	88° 36' 9.711" E	27° 12' 40.819" N	76.53	165468.75	22°9'17"(L)	1022.845
3188	TP3174	658703.037	3010931.690	88° 36' 8.921" E	27° 12' 43.203" N	35.53	165545.28	14°24'8"(L)	1026.564
3189	TP3175	658684.393	3010961.936	88° 36' 8.257" E	27° 12' 44.194" N	29.54	165580.81	12°49'43"(L)	1028.427
3190	TP3176	658663.698	3010983.011	88° 36' 7.515" E	27° 12' 44.887" N	30.67	165610.35	11°28'59"(R)	1029.689
3191	TP3177	658646.996	3011008.734	88° 36' 6.920" E	27° 12' 45.730" N	44.97	165641.02	27°11'38"(R)	1031.049
3192	TP3178	658642.450	3011053.473	88° 36' 6.775" E	27° 12' 47.185" N	31.88	165685.99	24°15'47"(R)	1032.589
3193	TP3179	658652.544	3011083.709	88° 36' 7.156" E	27° 12' 48.163" N	30.67	165717.86	6°20'59"(L)	1032.910
3194	TP3180	658658.978	3011113.692	88° 36' 7.404" E	27° 12' 49.135" N	37.13	165748.53	2°12'18"(L)	1033.464
3195	TP3181	658665.365	3011150.266	88° 36' 7.653" E	27° 12' 50.320" N	26.80	165785.66	9°25'57"(L)	1034.159
3196	TP3182	658665.587	3011177.069	88° 36' 7.674" E	27° 12' 51.191" N	27.76	165812.46	26°7'24"(L)	1034.603
3197	TP3183	658653.570	3011202.095	88° 36' 7.249" E	27° 12' 52.009" N	41.12	165840.22	8°56'20"(L)	1035.875
3198	TP3184	658641.747	3011241.477	88° 36' 6.837" E	27° 12' 53.293" N	37.50	165881.34	57°14'25"(R)	1038.170
3199	TP3185	658666.119	3011269.983	88° 36' 7.736" E	27° 12' 54.209" N	64.72	165918.85	15°24'24"R	1039.654
3200	TP3186	658719.732	3011306.232	88° 36' 9.701" E	27° 12' 55.365" N	15.57	165983.56	14°27'15"(L)	1042.300
3201	TP3187	658730.045	3011317.896	88° 36' 10.082" E	27° 12' 55.740" N	34.21	165999.13	26°19'25"(L)	1043.165
3202	TP3188	658738.992	3011350.921	88° 36' 10.422" E	27° 12' 56.809" N	34.45	166033.35	20°24'11"(R)	1045.145
3203	TP3189	658759.026	3011378.943	88° 36' 11.163" E	27° 12' 57.711" N	65.11	166067.79	5°29'6"(R)	1046.368
3204	TP3190	658801.785	3011428.051	88° 36' 12.740" E	27° 12' 59.289" N	14.77	166132.91	23°18'17"(L)	1049.018
3205	TP3191	658806.286	3011442.120	88° 36' 12.910" E	27° 12' 59.744" N	35.11	166147.68	47°50'55"(L)	1049.879
3206	TP3192	658788.673	3011472.495	88° 36' 12.284" E	27° 13' 0.738" N	24.71	166182.79	15°49'20"(L)	1051.957
3207	TP3193	658770.920	3011489.682	88° 36' 11.647" E	27° 13' 1.304" N	23.33	166207.50	6°57'5"(L)	1053.419
3208	TP3194	658752.317	3011503.761	88° 36' 10.977" E	27° 13' 1.769" N	9.59	166230.83	75°26'10"(L)	1054.239
3209	TP3195	658744.790	3011497.813	88° 36' 10.701" E	27° 13' 1.579" N	9.78	166240.43	10°58'46"(R)	1055.568
3210	TP3196	658737.382	3011491.428	88° 36' 10.429" E	27° 13' 1.374" N	57.92	166250.21	88°50'50"(L)	1057.583
3211	TP3197	658774.309	3011446.801	88° 36' 11.750" E	27° 12' 59.909" N	9.88	166308.13	9°12'37"R	1059.167
3212	TP3198	658779.308	3011438.279	88° 36' 11.928" E	27° 12' 59.630" N	15.34	166318.01	81°3'25"(R)	1060.045
3213	TP3199	658767.447	3011428.557	88° 36' 11.492" E	27° 12' 59.319" N	54.50	166333.35	83°38'56"(R)	1061.992
3214	TP3200	658728.451	3011466.625	88° 36' 10.093" E	27° 13' 0.572" N	58.16	166387.84	7°10'48"(L)	1064.463
3215	TP3201	658682.083	3011501.731	88° 36' 8.424" E	27° 13' 1.732" N	37.64	166446.00	21°1'8"(R)	1067.770
3216	TP3202	658662.220	3011533.703	88° 36' 7.717" E	27° 13' 2.779" N	16.49	166483.64	20°26'20"(R)	1069.222
3217	TP3203	658658.958	3011549.863	88° 36' 7.606" E	27° 13' 3.305" N	9.46	166500.13	122°21'0"(L)	1069.384
3218	TP3204	658652.126	3011543.320	88° 36' 7.355" E	27° 13' 3.096" N	9.60	166509.59	31°52'5"(R)	1069.988
3219	TP3205	658643.023	3011540.264	88° 36' 7.023" E	27° 13' 3.000" N	36.28	166519.19	85°43'1"(L)	1069.943
3220	TP3206	658651.970	3011505.102	88° 36' 7.331" E	27° 13' 1.854" N	84.85	166555.47	31°30'31"(L)	1071.635
3221	TP3207	658712.783	3011445.933	88° 36' 9.514" E	27° 12' 59.907" N	37.64	166640.32	0°15'48"R)	1072.892
3222	TP3208	658739.640	3011419.561	88° 36' 10.478" E	27° 12' 59.039" N	18.93	166677.96	86°13'30"(R)	1074.625
3223	TP3209	658725.155	3011407.377	88° 36' 9.945" E	27° 12' 58.649" N	107.43	166696.89	82°2'50"(R)	1076.765
3224	TP3210	658645.296	3011479.233	88° 36' 7.077" E	27° 13' 1.016" N	34.13	166804.31	5°54'45"(R)	1080.712
3225	TP3211	658622.411	3011504.554	88° 36' 6.257" E	27° 13' 1.849" N	33.24	166838.44	23°13'34"R	1081.698
3226	TP3212	658611.656	3011536.001	88° 36' 5.881" E	27° 13' 2.875" N	30.37	166871.68	26°32'29"(R)	1082.766
3227	TP3213	658615.704	3011566.097	88° 36' 6.042" E	27° 13' 3.851" N	45.49	166902.05	45°50'34"(L)	1083.346
3228	TP3214	658587.584	3011601.854	88° 36' 5.036" E	27° 13' 5.024" N	63.20	166947.54	9°51'19"(R)	1086.288
3229	TP3215	658557.597	3011657.483	88° 36' 3.973" E	27° 13' 6.844" N	58.71	167010.73	2°20'52"(R)	1089.656
3230	TP3216	658531.878	3011710.263	88° 36' 3.062" E	27° 13' 8.570" N	30.95	167069.45	43°12'23"(L)	1092.962
3231	TP3217	658502.950	3011721.260	88° 36' 2.016" E	27° 13' 8.939" N	23.45	167100.39	9°49'3"(R)	1095.159
3232	TP3218	658482.776	3011733.206	88° 36' 1.289" E	27° 13' 9.335" N	37.66	167123.84	15°27'40"(R)	1096.352
3233	TP3219	658456.656	3011760.342	88° 36' 0.352" E	27° 13' 10.228" N	54.27	167161.50	18°20'0"(L)	1097.203
3234	TP3220	658408.632	3011785.619	88° 35' 58.618" E	27° 13' 11.069" N	77.18	167215.77	28°7'50"(R)	1098.560

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
3235	TP3221	658365.351	3011849.521	88° 35' 57.075" E	27° 13' 13.163" N	22.02	167292.95	84°29'50"(L)	1101.649
3236	TP3222	658346.019	3011838.978	88° 35' 56.368" E	27° 13' 12.829" N	28.78	167314.97	81°37'28"(L)	1103.099
3237	TP3223	658355.973	3011811.970	88° 35' 56.717" E	27° 13' 11.947" N	19.35	167343.76	28°1'46"(L)	1103.402
3238	TP3224	658370.411	3011799.089	88° 35' 57.236" E	27° 13' 11.522" N	31.74	167363.11	8°56'12"(R)	1104.837
3239	TP3225	658390.525	3011774.535	88° 35' 57.955" E	27° 13' 10.716" N	35.96	167394.85	4°47'8"(L)	1105.859
3240	TP3226	658415.558	3011748.712	88° 35' 58.853" E	27° 13' 9.867" N	76.07	167430.81	3°52'12"(R)	1107.565
3241	TP3227	658464.701	3011690.641	88° 36' 0.612" E	27° 13' 7.960" N	34.88	167506.89	1°58'4"(R)	1110.345
3242	TP3228	658486.305	3011663.258	88° 36' 1.384" E	27° 13' 7.061" N	50.37	167541.76	27°57'58"(R)	1111.295
3243	TP3229	658495.317	3011613.697	88° 36' 1.689" E	27° 13' 5.447" N	36.20	167592.14	8°7'0"(L)	1113.840
3244	TP3230	658506.757	3011579.352	88° 36' 2.089" E	27° 13' 4.327" N	35.75	167628.34	2°33'17"(L)	1114.286
3245	TP3231	658519.557	3011545.967	88° 36' 2.538" E	27° 13' 3.237" N	64.88	167664.09	20°56'30"(R)	1115.271
3246	TP3232	658519.597	3011481.086	88° 36' 2.510" E	27° 13' 1.129" N	23.29	167728.97	5°13'44"(R)	1118.562
3247	TP3233	658517.489	3011457.896	88° 36' 2.422" E	27° 13' 0.376" N	21.06	167752.26	85°57'50"(R)	1120.278
3248	TP3234	658496.432	3011458.322	88° 36' 1.657" E	27° 13' 0.399" N	34.22	167773.32	87°59'41"(R)	1121.961
3249	TP3235	658499.280	3011492.427	88° 36' 1.777" E	27° 13' 1.506" N	42.22	167807.55	4°33'58"(L)	1122.210
3250	TP3236	658499.433	3011534.645	88° 36' 1.802" E	27° 13' 2.877" N	38.02	167849.76	13°29'30"(L)	1121.823
3251	TP3237	658490.696	3011571.651	88° 36' 1.501" E	27° 13' 4.083" N	59.38	167887.79	18°11'19"(L)	1121.010
3252	TP3238	658459.694	3011622.296	88° 36' 0.398" E	27° 13' 5.742" N	35.56	167947.17	0°4'36"®	1121.942
3253	TP3239	658441.170	3011652.648	88° 35' 59.739" E	27° 13' 6.735" N	60.24	167982.73	15°45'32"(L)	1122.949
3254	TP3240	658397.006	3011693.609	88° 35' 58.153" E	27° 13' 8.084" N	34.81	168042.96	0°7'20"(L)	1125.743
3255	TP3241	658371.432	3011717.227	88° 35' 57.235" E	27° 13' 8.862" N	41.48	168077.77	21°44'13"(L)	1126.034
3256	TP3242	658332.705	3011732.082	88° 35' 55.834" E	27° 13' 9.361" N	37.83	168119.25	40°0'56"(R)	1127.810
3257	TP3243	658314.364	3011765.172	88° 35' 55.183" E	27° 13' 10.444" N	47.45	168157.08	0°14'20"(R)	1128.347
3258	TP3244	658291.534	3011806.769	88° 35' 54.373" E	27° 13' 11.805" N	43.93	168204.53	56°0'35"(L)	1130.592
3259	TP3245	658247.786	3011810.774	88° 35' 52.785" E	27° 13' 11.953" N	37.28	168248.46	14°35'11"(L)	1135.381
3260	TP3246	658211.004	3011804.714	88° 35' 51.445" E	27° 13' 11.771" N	47.32	168285.74	8°22'4"(R)	1138.012
3261	TP3247	658163.689	3011803.898	88° 35' 49.725" E	27° 13' 11.764" N	22.44	168333.06	8°4'28"(R)	1141.363
3262	TP3248	658149.066	3011805.716	88° 35' 49.195" E	27° 13' 11.830" N	8.71	168347.80	57°19'44"(R)	1142.618
3263	TP3249	658143.000	3011818.386	88° 35' 48.980" E	27° 13' 12.244" N	27.04	168361.85	27°42'13"(R)	1143.013
3264	TP3250	658144.000	3011845.410	88° 35' 49.029" E	27° 13' 13.121" N	46.12	168388.89	9°6'14"(R)	1144.049
3265	TP3251	658152.976	3011890.647	88° 35' 49.376" E	27° 13' 14.587" N	32.97	168435.01	12°45'23"(R)	1147.207
3266	TP3252	658166.376	3011920.773	88° 35' 49.877" E	27° 13' 15.560" N	45.95	168467.98	52°41'47"(L)	1149.442
3267	TP3253	658144.299	3011961.070	88° 35' 49.094" E	27° 13' 16.879" N	44.09	168513.93	50°40'40"(R)	1151.899
3268	TP3254	658160.789	3012001.965	88° 35' 49.712" E	27° 13' 18.201" N	41.20	168558.02	13°6'1"(R)	1153.839
3269	TP3255	658184.455	3012035.687	88° 35' 50.587" E	27° 13' 19.286" N	36.57	168599.22	16°20'46"(R)	1155.299
3270	TP3256	658213.036	3012058.497	88° 35' 51.637" E	27° 13' 20.016" N	40.89	168635.79	75°25'42"(L)	1156.470
3271	TP3257	658196.392	3012095.843	88° 35' 51.049" E	27° 13' 21.236" N	69.88	168676.68	18°10'59"(L)	1158.758
3272	TP3258	658149.450	3012147.605	88° 35' 49.367" E	27° 13' 22.937" N	55.39	168746.55	12°48'15"(L)	1161.887
3273	TP3259	658104.074	3012179.368	88° 35' 47.733" E	27° 13' 23.988" N	65.31	168801.94	3°37'53"(R)	1164.659
3274	TP3260	658053.048	3012220.134	88° 35' 45.897" E	27° 13' 25.333" N	36.31	168867.25	10°23'38"(L)	1167.056
3275	TP3261	658021.058	3012237.308	88° 35' 44.743" E	27° 13' 25.905" N	36.57	168903.56	8°28'52"(R)	1169.968
3276	TP3262	657991.741	3012259.168	88° 35' 43.687" E	27° 13' 26.627" N	48.64	168940.13	2°26'50"(R)	1172.114
3277	TP3263	657954.021	3012289.885	88° 35' 42.331" E	27° 13' 27.641" N	48.64	168988.78	0°0'52"(R)	1175.863
3278	TP3264	657916.301	3012320.602	88° 35' 40.974" E	27° 13' 28.654" N	57.19	169037.42	41°10'7"(R)	1179.911
3279	TP3265	657906.690	3012376.982	88° 35' 40.651" E	27° 13' 30.490" N	35.95	169094.61	16°55'10"(L)	1183.642
3280	TP3266	657890.596	3012409.130	88° 35' 40.081" E	27° 13' 31.541" N	36.44	169130.57	33°4'25"(R)	1187.345
3281	TP3267	657894.709	3012445.341	88° 35' 40.247" E	27° 13' 32.716" N	34.72	169167.01	16°59'2"(R)	1189.347
3282	TP3268	657908.534	3012477.191	88° 35' 40.764" E	27° 13' 33.745" N	11.05	169201.73	11°43'23"(L)	1190.998
3283	TP3269	657910.783	3012488.012	88° 35' 40.851" E	27° 13' 34.095" N	66.90	169212.78	36°17'42"(L)	1192.039
3284	TP3270	657882.981	3012548.866	88° 35' 39.869" E	27° 13' 36.084" N	41.60	169279.69	35°27'14"(R)	1197.342
3285	TP3271	657890.847	3012589.713	88° 35' 40.173" E	27° 13' 37.408" N	43.13	169321.28	7°42'15"(L)	1199.332
3286	TP3272	657893.251	3012632.775	88° 35' 40.281" E	27° 13' 38.806" N	35.67	169364.41	13°27'56"®	1200.987
3287	TP3273	657903.477	3012666.943	88° 35' 40.668" E	27° 13' 39.912" N	58.86	169400.08	40°34'17"(R)	1202.271
3288	TP3274	657952.969	3012698.799	88° 35' 42.482" E	27° 13' 40.926" N	42.77	169458.94	14°24'34"(L)	1203.124
3289	TP3275	657982.043	3012730.170	88° 35' 43.553" E	27° 13' 41.934" N	33.90	169501.71	33°1'56"(L)	1203.363
3290	TP3276	657987.809	3012763.581	88° 35' 43.778" E	27° 13' 43.017" N	67.09	169535.61	4°34'21"(R)	1204.647
3291	TP3277	658004.452	3012828.572	88° 35' 44.413" E	27° 13' 45.121" N	44.66	169602.70	26°41'41"(L)	1207.324
3292	TP3278	657994.914	3012872.205	88° 35' 44.087" E	27° 13' 46.543" N	41.60	169647.37	25°46'9"(R)	1209.505
3293	TP3279	658004.582	3012912.666	88° 35' 44.457" E	27° 13' 47.853" N	45.35	169688.97	14°51'36"(R)	1210.287
3294	TP3280	658026.080	3012952.596	88° 35' 45.257" E	27° 13' 49.142" N	42.27	169734.31	2°24'41"(L)	1211.182
3295	TP3281	658044.534	3012990.622	88° 35' 45.945" E	27° 13' 50.370" N	23.43	169776.58	2°57'50"(L)	1211.503
3296	TP3282	658053.660	3013012.202	88° 35' 46.287" E	27° 13' 51.067" N	63.97	169800.01	30°51'49"(L)	1210.713
3297	TP3283	658044.823	3013075.557	88° 35' 45.995" E	27° 13' 53.129" N	47.01	169863.98	6°30'13"(L)	1210.386
3298	TP3284	658033.098	3013121.077	88° 35' 45.590" E	27° 13' 54.613" N	55.92	169910.99	17°10'45"(R)	1210.720
3299	TP3285	658035.766	3013176.931	88° 35' 45.713" E	27° 13' 56.426" N	14.80	169966.90	0°27'35"(R)	1212.542
3300	TP3286	658036.591	3013191.704	88° 35' 45.749" E	27° 13' 56.906" N	33.46	169981.70	8°22'52"(L)	1213.882

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
3301	TP3287	658033.566	3013225.032	88° 35' 45.655" E	27° 13' 57.990" N	22.32	170015.17	76°20'12"(L)	1216.250
3302	TP3288	658011.338	3013222.996	88° 35' 44.846" E	27° 13' 57.933" N	28.25	170037.49	87°28'56"(L)	1219.218
3303	TP3289	658012.677	3013194.773	88° 35' 44.882" E	27° 13' 57.015" N	30.36	170065.74	9°22'12"(R)	1221.002
3304	TP3290	658009.159	3013164.617	88° 35' 44.740" E	27° 13' 56.037" N	63.34	170096.10	17°42'34"(R)	1222.842
3305	TP3291	657983.030	3013106.917	88° 35' 43.763" E	27° 13' 54.173" N	3.96	170159.44	19°23'27"(L)	1227.336
3306	TP3292	657982.686	3013102.967	88° 35' 43.749" E	27° 13' 54.045" N	39.16	170163.41	20°6'25"(L)	1227.571
3307	TP3293	657992.910	3013065.169	88° 35' 44.103" E	27° 13' 52.813" N	34.66	170202.56	10°51'46"(R)	1230.079
3308	TP3294	657995.491	3013030.603	88° 35' 44.181" E	27° 13' 51.689" N	53.06	170237.23	16°14'4"(R)	1230.626
3309	TP3295	657984.494	3012978.695	88° 35' 43.757" E	27° 13' 50.007" N	42.06	170290.29	52°59'37"(R)	1233.282
3310	TP3296	657946.384	3012960.889	88° 35' 42.364" E	27° 13' 49.444" N	79.74	170332.35	15°33'34"(L)	1235.697
3311	TP3297	657885.847	3012908.996	88° 35' 40.140" E	27° 13' 47.783" N	30.73	170412.08	23°16'48"(L)	1238.751
3312	TP3298	657872.320	3012881.406	88° 35' 39.635" E	27° 13' 46.892" N	43.33	170442.81	6°40'39"(L)	1240.818
3313	TP3299	657857.901	3012840.550	88° 35' 39.092" E	27° 13' 45.571" N	32.80	170486.14	8°14'20"(L)	1242.924
3314	TP3300	657851.530	3012808.373	88° 35' 38.846" E	27° 13' 44.528" N	31.62	170518.94	24°56'24"(R)	1244.059
3315	TP3301	657832.879	3012782.835	88° 35' 38.156" E	27° 13' 43.706" N	10.91	170550.56	53°43'11"(L)	1245.805
3316	TP3302	657821.974	3012782.808	88° 35' 37.760" E	27° 13' 43.710" N	25.02	170561.47	18°13'8"(L)	1248.209
3317	TP3303	657798.232	3012774.929	88° 35' 36.893" E	27° 13' 43.464" N	90.29	170586.48	20°8'14"(L)	1249.362
3318	TP3304	657727.563	3012718.724	88° 35' 34.299" E	27° 13' 41.667" N	33.09	170676.78	31°6'49"(L)	1253.370
3319	TP3305	657716.034	3012687.707	88° 35' 33.865" E	27° 13' 40.664" N	30.39	170709.87	13°50'23"(R)	1253.649
3320	TP3306	657698.938	3012662.579	88° 35' 33.232" E	27° 13' 39.855" N	37.92	170740.26	5°13'32"(L)	1255.819
3321	TP3307	657680.554	3012629.419	88° 35' 32.549" E	27° 13' 38.785" N	41.03	170778.18	6°52'8"(L)	1256.601
3322	TP3308	657665.093	3012591.410	88° 35' 31.969" E	27° 13' 37.556" N	30.28	170819.21	8°29'37"(L)	1257.879
3323	TP3309	657657.952	3012561.986	88° 35' 31.696" E	27° 13' 36.603" N	35.92	170849.49	2°22'4"(L)	1258.947
3324	TP3310	657650.929	3012526.755	88° 35' 31.425" E	27° 13' 35.462" N	33.89	170885.41	12°4'50"(R)	1260.687
3325	TP3311	657637.493	3012495.638	88° 35' 30.922" E	27° 13' 34.456" N	25.59	170919.31	22°48'46"(R)	1263.005
3326	TP3312	657619.035	3012477.917	88° 35' 30.243" E	27° 13' 33.888" N	21.91	170944.89	59°38'7"(R)	1263.886
3327	TP3313	657597.955	3012483.883	88° 35' 29.480" E	27° 13' 34.091" N	11.89	170966.80	32°27'5"(R)	1265.071
3328	TP3314	657590.040	3012492.752	88° 35' 29.196" E	27° 13' 34.382" N	59.82	170978.69	85°12'16"(R)	1266.283
3329	TP3315	657631.185	3012536.173	88° 35' 30.712" E	27° 13' 35.776" N	105.03	171038.51	37°28'5"(L)	1265.653
3330	TP3316	657642.145	3012640.625	88° 35' 31.158" E	27° 13' 39.165" N	37.51	171143.53	5°2'22"(L)	1266.537
3331	TP3317	657642.767	3012678.126	88° 35' 31.198" E	27° 13' 40.383" N	80.16	171181.04	1°17'7"(L)	1267.358
3332	TP3318	657642.299	3012758.282	88° 35' 31.218" E	27° 13' 42.987" N	44.18	171261.20	22°16'45"(R)	1269.782
3333	TP3319	657658.810	3012799.263	88° 35' 31.837" E	27° 13' 44.312" N	74.77	171305.38	8°42'20"(L)	1271.854
3334	TP3320	657675.933	3012872.043	88° 35' 32.493" E	27° 13' 46.669" N	55.31	171380.15	14°57'25"(L)	1275.716
3335	TP3321	657674.275	3012927.326	88° 35' 32.458" E	27° 13' 48.466" N	35.40	171435.45	1°10'43"(R)	1277.661
3336	TP3322	657673.942	3012962.723	88° 35' 32.463" E	27° 13' 49.616" N	45.61	171470.85	8°0'6"R	1279.282
3337	TP3323	657679.865	3013007.943	88° 35' 32.699" E	27° 13' 51.083" N	37.50	171516.46	18°31'7"(R)	1281.385
3338	TP3324	657696.291	3013041.649	88° 35' 33.312" E	27° 13' 52.171" N	42.51	171553.95	21°29'49"R	1282.828
3339	TP3325	657727.618	3013070.377	88° 35' 34.463" E	27° 13' 53.092" N	187.16	171596.46	29°40'55"(L)	1284.357
3340	TP3326	657784.819	3013248.579	88° 35' 36.625" E	27° 13' 58.858" N	37.11	171783.62	26°36'25"(L)	1288.981
3341	TP3327	657779.135	3013285.250	88° 35' 36.435" E	27° 14' 0.052" N	12.64	171820.72	76°52'10"(L)	1289.644
3342	TP3328	657766.532	3013286.202	88° 35' 35.978" E	27° 14' 0.088" N	33.81	171833.36	76°52'10"(L)	1292.286
3343	TP3329	657755.773	3013318.258	88° 35' 35.601" E	27° 14' 1.134" N	20.42	171867.18	19°34'59"R	1295.008
3344	TP3330	657756.140	3013338.675	88° 35' 35.624" E	27° 14' 1.797" N	49.73	171887.60	44°27'15"(R)	1296.682
3345	TP3331	657791.602	3013373.543	88° 35' 36.929" E	27° 14' 2.915" N	39.66	171937.33	37°49'43"(L)	1298.758
3346	TP3332	657796.886	3013412.850	88° 35' 37.139" E	27° 14' 4.190" N	27.78	171976.99	12°32'51"(L)	1301.684
3347	TP3333	657794.516	3013440.530	88° 35' 37.066" E	27° 14' 5.090" N	36.04	172004.77	7°4'43"(L)	1303.246
3348	TP3334	657787.040	3013475.791	88° 35' 36.811" E	27° 14' 6.239" N	29.51	172040.82	3°42'16"(L)	1305.015
3349	TP3335	657779.066	3013504.205	88° 35' 36.534" E	27° 14' 7.165" N	32.02	172070.33	25°46'23"(L)	1305.786
3350	TP3336	657757.872	3013528.205	88° 35' 35.775" E	27° 14' 7.954" N	35.25	172102.35	2°50'7"(L)	1307.103
3351	TP3337	657733.257	3013553.443	88° 35' 34.892" E	27° 14' 8.784" N	24.11	172137.60	44°1'55"®	1307.833
3352	TP3338	657733.151	3013577.555	88° 35' 34.899" E	27° 14' 9.567" N	18.24	172161.71	12°51'24"®	1308.179
3353	TP3339	657737.132	3013595.358	88° 35' 35.052" E	27° 14' 10.144" N	38.86	172179.96	42°23'44"(R)	1308.174
3354	TP3340	657768.962	3013617.645	88° 35' 36.219" E	27° 14' 10.855" N	58.15	172218.81	28°20'45"(L)	1309.712
3355	TP3341	657795.050	3013669.618	88° 35' 37.192" E	27° 14' 12.533" N	55.35	172276.97	19°42'2"(L)	1312.971
3356	TP3342	657801.751	3013724.558	88° 35' 37.461" E	27° 14' 14.315" N	55.83	172332.31	12°50'57"(L)	1316.934
3357	TP3343	657796.017	3013780.091	88° 35' 37.278" E	27° 14' 16.122" N	19.46	172388.14	28°43'0"(L)	1320.508
3358	TP3344	657784.962	3013796.109	88° 35' 36.883" E	27° 14' 16.647" N	16.46	172407.60	54°36'30"(L)	1321.855
3359	TP3345	657768.769	3013793.184	88° 35' 36.293" E	27° 14' 16.558" N	59.14	172424.06	82°42'37"(L)	1322.867
3360	TP3346	657771.810	3013734.122	88° 35' 36.377" E	27° 14' 14.638" N	18.87	172483.20	16°20'5"(R)	1322.398
3361	TP3347	657767.440	3013715.760	88° 35' 36.209" E	27° 14' 14.043" N	58.81	172502.07	28°34'0"®	1322.347
3362	TP3348	657728.124	3013672.024	88° 35' 34.760" E	27° 14' 12.639" N	23.40	172560.88	4°14'29"(L)	1322.692
3363	TP3349	657713.810	3013653.512	88° 35' 34.231" E	27° 14' 12.043" N	8.97	172584.28	85°34'33"(R)	1323.138
3364	TP3350	657706.309	3013658.437	88° 35' 33.961" E	27° 14' 12.206" N	8.11	172593.26	6°2'58"(R)	1323.822
3365	TP3351	657700.038	3013663.577	88° 35' 33.735" E	27° 14' 12.376" N	49.77	172601.37	84°35'6"(R)	1326.158
3366	TP3352	657727.811	3013704.873	88° 35' 34.764" E	27° 14' 13.706" N	49.52	172651.13	16°17'7"(L)	1327.315

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
3367	TP3353	657742.814	3013752.062	88° 35' 35.331" E	27° 14' 15.233" N	61.62	172700.65	16°17'7"(L)	1329.904
3368	TP3354	657728.110	3013811.906	88° 35' 34.824" E	27° 14' 17.183" N	32.46	172762.27	0°31'36"(R)	1332.672
3369	TP3355	657720.655	3013843.496	88° 35' 34.568" E	27° 14' 18.213" N	28.61	172794.73	48°38'44"(R)	1333.412
3370	TP3356	657737.215	3013866.826	88° 35' 35.181" E	27° 14' 18.964" N	28.96	172823.34	11°44'58"(R)	1336.231
3371	TP3357	657758.436	3013886.534	88° 35' 35.961" E	27° 14' 19.595" N	31.58	172852.30	20°48'4"(R)	1338.205
3372	TP3358	657772.436	3013914.841	88° 35' 36.483" E	27° 14' 20.509" N	64.78	172883.88	27°51'3"(R)	1339.576
3373	TP3359	657824.956	3013952.766	88° 35' 38.410" E	27° 14' 21.720" N	29.67	172948.66	29°35'46"(L)	1341.007
3374	TP3360	657837.294	3013979.751	88° 35' 38.871" E	27° 14' 22.591" N	58.77	172978.34	38°13'11"(L)	1341.998
3375	TP3361	657823.426	3014036.861	88° 35' 38.393" E	27° 14' 24.453" N	35.49	173037.11	0°11'20"(L)	1345.348
3376	TP3362	657814.937	3014071.324	88° 35' 38.100" E	27° 14' 25.576" N	34.08	173072.60	2°18'18"®	1347.557
3377	TP3363	657808.123	3014104.718	88° 35' 37.868" E	27° 14' 26.664" N	57.74	173106.68	17°29'2"®	1348.440
3378	TP3364	657814.110	3014162.151	88° 35' 38.112" E	27° 14' 28.527" N	22.12	173164.42	6°8'21"(R)	1353.766
3379	TP3365	657818.743	3014183.779	88° 35' 38.291" E	27° 14' 29.228" N	22.09	173186.54	59°47'53"®	1355.754
3380	TP3366	657839.738	3014190.646	88° 35' 39.057" E	27° 14' 29.442" N	32.30	173208.63	23°34'30"(R)	1355.912
3381	TP3367	657871.893	3014187.570	88° 35' 40.224" E	27° 14' 29.329" N	58.58	173240.93	12°27'54"(L)	1356.298
3382	TP3368	657930.041	3014194.711	88° 35' 42.341" E	27° 14' 29.537" N	25.64	173299.52	15°47'9"(L)	1358.759
3383	TP3369	657953.676	3014204.640	88° 35' 43.205" E	27° 14' 29.850" N	82.05	173325.16	26°48'34"(L)	1360.386
3384	TP3370	658006.855	3014267.118	88° 35' 45.167" E	27° 14' 31.857" N	35.71	173407.20	6°57'41"(R)	1360.267
3385	TP3371	658033.127	3014291.306	88° 35' 46.133" E	27° 14' 32.632" N	32.69	173442.91	29°34'42"(L)	1357.554
3386	TP3372	658043.113	3014322.434	88° 35' 46.511" E	27° 14' 33.640" N	46.49	173475.60	26°20'45"(R)	1355.869
3387	TP3373	658075.481	3014355.798	88° 35' 47.703" E	27° 14' 34.710" N	67.23	173522.09	28°59'9"(R)	1355.500
3388	TP3374	658139.812	3014375.321	88° 35' 50.050" E	27° 14' 35.318" N	8.08	173589.31	88°0'26"(R)	1355.849
3389	TP3375	658143.109	3014367.949	88° 35' 50.166" E	27° 14' 35.077" N	105.67	173597.39	88°36'5"(L)	1351.691
3390	TP3376	658240.599	3014408.726	88° 35' 53.729" E	27° 14' 36.361" N	50.68	173703.07	14°13'59"(R)	1349.754
3391	TP3377	658290.730	3014416.187	88° 35' 55.555" E	27° 14' 36.583" N	22.52	173753.75	16°10'27"(L)	1346.812
3392	TP3378	658311.197	3014425.575	88° 35' 56.303" E	27° 14' 36.879" N	28.10	173776.27	4°6'18"(L)	1340.492
3393	TP3379	658335.831	3014439.086	88° 35' 57.205" E	27° 14' 37.308" N	20.67	173804.36	13°21'58"®	1338.876
3394	TP3380	658355.760	3014444.567	88° 35' 57.932" E	27° 14' 37.478" N	58.51	173825.03	20°46'56"(R)	1337.410
3395	TP3381	658414.008	3014439.057	88° 36' 0.046" E	27° 14' 37.275" N	29.74	173883.54	5°31'32"(R)	1336.267
3396	TP3382	658443.210	3014433.418	88° 36' 1.105" E	27° 14' 37.079" N	36.03	173913.28	7°53'5"(L)	1333.319
3397	TP3383	658479.193	3014431.504	88° 36' 2.412" E	27° 14' 37.002" N	11.94	173949.31	15°49'6"(L)	1331.876
3398	TP3384	658490.838	3014434.144	88° 36' 2.837" E	27° 14' 37.083" N	33.85	173961.25	25°7'33"(L)	1330.078
3399	TP3385	658517.545	3014454.934	88° 36' 3.817" E	27° 14' 37.747" N	33.02	173995.10	10°48'33"(L)	1330.046
3400	TP3386	658539.333	3014479.742	88° 36' 4.621" E	27° 14' 38.544" N	16.19	174028.12	0°39'44"(L)	1327.774
3401	TP3387	658549.877	3014492.031	88° 36' 5.010" E	27° 14' 38.939" N	28.47	174044.31	0°39'44"(L)	1326.175
3402	TP3388	658578.157	3014488.786	88° 36' 6.036" E	27° 14' 38.822" N	106.57	174072.78	2°28'5"(L)	1325.758
3403	TP3389	658683.408	3014472.090	88° 36' 9.854" E	27° 14' 38.236" N	39.27	174179.34	43°30'49"(L)	1325.364
3404	TP3390	658715.772	3014494.333	88° 36' 11.041" E	27° 14' 38.945" N	36.56	174218.61	21°53'29"(R)	1324.128
3405	TP3391	658751.452	3014502.314	88° 36' 12.342" E	27° 14' 39.190" N	47.85	174255.17	18°0'51"(L)	1323.012
3406	TP3392	658792.629	3014526.688	88° 36' 13.850" E	27° 14' 39.964" N	31.91	174303.02	20°54'40"(R)	1321.506
3407	TP3393	658824.082	3014532.071	88° 36' 14.996" E	27° 14' 40.126" N	26.05	174334.93	28°15'50"®	1320.542
3408	TP3394	658848.774	3014523.784	88° 36' 15.889" E	27° 14' 39.847" N	23.99	174360.98	18°26'24"(L)	1320.126
3409	TP3395	658872.768	3014523.737	88° 36' 16.761" E	27° 14' 39.835" N	96.17	174384.97	18°10'24"(L)	1319.210
3410	TP3396	658964.197	3014553.552	88° 36' 20.099" E	27° 14' 40.766" N	28.15	174481.14	20°1'22"(L)	1315.074
3411	TP3397	658986.355	3014570.916	88° 36' 20.912" E	27° 14' 41.320" N	29.70	174509.29	8°13'53"(L)	1314.788
3412	TP3398	659006.869	3014592.394	88° 36' 21.668" E	27° 14' 42.010" N	37.04	174538.99	31°18'35"(R)	1314.237
3413	TP3399	659042.650	3014601.985	88° 36' 22.973" E	27° 14' 42.306" N	27.22	174576.04	34°49'35"(L)	1313.219
3414	TP3400	659060.206	3014622.783	88° 36' 23.621" E	27° 14' 42.975" N	23.04	174603.25	34°49'35"(L)	1311.892
3415	TP3401	659063.187	3014645.632	88° 36' 23.740" E	27° 14' 43.716" N	21.60	174626.30	23°20'5"(R)	1310.293
3416	TP3402	659074.238	3014664.194	88° 36' 24.150" E	27° 14' 44.314" N	59.29	174647.90	33°54'18"(R)	1309.244
3417	TP3403	659127.828	3014689.557	88° 36' 26.110" E	27° 14' 45.116" N	31.79	174707.19	43°13'2"(L)	1307.290
3418	TP3404	659139.457	3014719.146	88° 36' 26.547" E	27° 14' 46.072" N	34.91	174738.98	16°6'51"(L)	1306.727
3419	TP3405	659142.707	3014753.906	88° 36' 26.681" E	27° 14' 47.200" N	37.66	174773.89	30°48'24"(R)	1305.338
3420	TP3406	659164.920	3014784.314	88° 36' 27.503" E	27° 14' 48.179" N	23.92	174811.55	27°13'51"(L)	1304.632
3421	TP3407	659168.628	3014807.946	88° 36' 27.648" E	27° 14' 48.945" N	22.62	174835.47	47°35'49"(L)	1304.229
3422	TP3408	659154.490	3014825.606	88° 36' 27.143" E	27° 14' 49.525" N	30.48	174858.09	35°23'26"(L)	1303.597
3423	TP3409	659125.179	3014833.972	88° 36' 26.081" E	27° 14' 49.809" N	43.18	174888.57	28°49'48"(R)	1301.913
3424	TP3410	659094.515	3014864.380	88° 36' 24.981" E	27° 14' 50.810" N	23.86	174931.76	69°25'54"(R)	1299.494
3425	TP3411	659104.294	3014886.148	88° 36' 25.346" E	27° 14' 51.513" N	30.47	174955.62	17°12'21"(R)	1298.988
3426	TP3412	659124.444	3014909.006	88° 36' 26.090" E	27° 14' 52.247" N	82.66	174986.09	22°52'55"(L)	1298.194
3427	TP3413	659150.694	3014987.390	88° 36' 27.080" E	27° 14' 54.783" N	37.47	175068.76	18°43'20"(R)	1297.293
3428	TP3414	659173.365	3015017.218	88° 36' 27.918" E	27° 14' 55.742" N	13.25	175106.22	18°43'20"(R)	1296.553
3429	TP3415	659176.586	3015030.075	88° 36' 28.042" E	27° 14' 56.159" N	6.17	175119.48	82°33'33"(L)	1295.731
3430	TP3416	659170.847	3015032.336	88° 36' 27.834" E	27° 14' 56.235" N	15.65	175125.65	4°54'44"(R)	1295.107
3431	TP3417	659155.660	3015036.125	88° 36' 27.284" E	27° 14' 56.364" N	73.29	175141.30	81°52'29"(L)	1294.611
3432	TP3418	659128.045	3014968.233	88° 36' 26.248" E	27° 14' 54.170" N	74.52	175214.59	9°0'17"(R)	1290.942

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
3433	TP3419	659089.510	3014904.450	88° 36' 24.818" E	27° 14' 52.114" N	19.47	175289.11	6°39'4"(R)	1287.479
3434	TP3420	659077.579	3014889.063	88° 36' 24.377" E	27° 14' 51.619" N	24.80	175308.58	27°41'14"(L)	1286.707
3435	TP3421	659073.228	3014864.643	88° 36' 24.207" E	27° 14' 50.827" N	70.68	175333.39	21°8'53"(L)	1284.745
3436	TP3422	659086.769	3014795.275	88° 36' 24.667" E	27° 14' 48.568" N	35.21	175404.06	24°5'0"(R)	1282.335
3437	TP3423	659078.825	3014760.969	88° 36' 24.362" E	27° 14' 47.457" N	29.06	175439.28	4°54'30"(R)	1281.312
3438	TP3424	659069.872	3014733.326	88° 36' 24.024" E	27° 14' 46.562" N	34.03	175468.33	19°46'22"(R)	1280.284
3439	TP3425	659049.054	3014706.409	88° 36' 23.255" E	27° 14' 45.696" N	74.53	175502.36	2°4'14"(R)	1279.678
3440	TP3426	659001.359	3014649.142	88° 36' 21.494" E	27° 14' 43.856" N	29.44	175576.89	10°48'2"®	1278.432
3441	TP3427	658978.616	3014630.454	88° 36' 20.659" E	27° 14' 43.258" N	23.86	175606.33	52°55'37"(R)	1277.625
3442	TP3428	658955.416	3014636.031	88° 36' 19.818" E	27° 14' 43.449" N	29.02	175630.19	29°26'50"(R)	1276.269
3443	TP3429	658934.180	3014655.809	88° 36' 19.055" E	27° 14' 44.100" N	62.14	175659.21	2°29'18"(R)	1275.095
3444	TP3430	658890.587	3014700.096	88° 36' 17.491" E	27° 14' 45.557" N	20.60	175721.35	36°50'59"(L)	1273.300
3445	TP3431	658870.215	3014703.178	88° 36' 16.752" E	27° 14' 45.666" N	70.62	175741.95	20°9'34"(L)	1272.692
3446	TP3432	658801.025	3014689.030	88° 36' 14.231" E	27° 14' 45.235" N	24.91	175812.57	28°8'31"(L)	1270.273
3447	TP3433	658781.859	3014673.119	88° 36' 13.527" E	27° 14' 44.726" N	22.55	175837.48	23°10'32"(R)	1269.492
3448	TP3434	658760.244	3014666.707	88° 36' 12.738" E	27° 14' 44.527" N	31.87	175860.03	23°10'32"®	1268.891
3449	TP3435	658728.994	3014672.984	88° 36' 11.605" E	27° 14' 44.744" N	18.67	175891.90	23°17'53"(L)	1267.608
3450	TP3436	658710.727	3014669.121	88° 36' 10.939" E	27° 14' 44.626" N	31.30	175910.58	48°9'10"(L)	1266.824
3451	TP3437	658695.121	3014641.988	88° 36' 10.359" E	27° 14' 43.751" N	29.04	175941.88	11°3'58"(R)	1266.397
3452	TP3438	658676.079	3014620.062	88° 36' 9.657" E	27° 14' 43.046" N	101.34	175970.92	48°30'26"(R)	1265.885
3453	TP3439	658574.740	3014619.142	88° 36' 5.973" E	27° 14' 43.059" N	37.69	176072.26	48°30'26"(R)	1261.910
3454	TP3440	658541.660	3014637.203	88° 36' 4.779" E	27° 14' 43.659" N	35.32	176109.95	20°47'24"(L)	1260.238
3455	TP3441	658506.671	3014642.023	88° 36' 3.509" E	27° 14' 43.830" N	37.42	176145.27	19°25'8"(L)	1258.899
3456	TP3442	658470.015	3014634.515	88° 36' 2.173" E	27° 14' 43.602" N	38.07	176182.69	10°25'50"(L)	1257.605
3457	TP3443	658434.721	3014620.251	88° 36' 0.884" E	27° 14' 43.153" N	39.36	176220.75	39°49'39"(R)	1257.253
3458	TP3444	658397.253	3014632.296	88° 35' 59.527" E	27° 14' 43.560" N	35.26	176260.11	36°37'54"(R)	1255.611
3459	TP3445	658376.754	3014660.985	88° 35' 58.795" E	27° 14' 44.500" N	67.48	176295.37	8°55'59"(L)	1253.630
3460	TP3446	658329.474	3014709.132	88° 35' 57.099" E	27° 14' 46.084" N	29.73	176362.85	36°25'57"®	1251.380
3461	TP3447	658325.312	3014738.566	88° 35' 56.962" E	27° 14' 47.042" N	24.59	176392.58	28°56'24"(L)	1249.674
3462	TP3448	658310.516	3014758.209	88° 35' 56.433" E	27° 14' 47.687" N	28.14	176417.17	17°35'38"(L)	1248.785
3463	TP3449	658287.583	3014774.518	88° 35' 55.607" E	27° 14' 48.226" N	34.08	176445.31	4°26'53"(L)	1247.672
3464	TP3450	658258.366	3014792.053	88° 35' 54.553" E	27° 14' 48.808" N	77.23	176479.38	19°1'51"(R)	1247.324
3465	TP3451	658208.727	3014851.213	88° 35' 52.776" E	27° 14' 50.750" N	15.67	176556.61	28°2'1"(R)	1243.480
3466	TP3452	658205.480	3014866.537	88° 35' 52.665" E	27° 14' 51.250" N	14.65	176572.28	42°4'59"(L)	1242.521
3467	TP3453	658193.619	3014875.139	88° 35' 52.238" E	27° 14' 51.534" N	39.09	176586.93	12°2'58"(L)	1242.199
3468	TP3454	658157.881	3014890.978	88° 35' 50.946" E	27° 14' 52.064" N	60.37	176626.02	62°37'46"(R)	1242.526
3469	TP3455	658154.230	3014951.236	88° 35' 50.841" E	27° 14' 54.023" N	32.09	176686.39	28°34'31"(L)	1238.671
3470	TP3456	658137.202	3014978.439	88° 35' 50.235" E	27° 14' 54.914" N	23.40	176718.48	31°15'42"(L)	1237.253
3471	TP3457	658116.293	3014988.953	88° 35' 49.480" E	27° 14' 55.264" N	46.83	176741.88	6°6'27"(L)	1236.652
3472	TP3458	658072.449	3015005.422	88° 35' 47.894" E	27° 14' 55.817" N	32.84	176788.72	7°18'58"(R)	1234.752
3473	TP3459	658043.432	3015020.788	88° 35' 46.846" E	27° 14' 56.328" N	34.89	176821.55	27°12'23"(R)	1233.704
3474	TP3460	658023.472	3015049.411	88° 35' 46.134" E	27° 14' 57.267" N	47.89	176856.45	16°16'22"(L)	1232.721
3475	TP3461	657986.168	3015079.444	88° 35' 44.792" E	27° 14' 58.258" N	30.83	176904.34	37°50'6"(R)	1232.033
3476	TP3462	657979.060	3015109.447	88° 35' 44.547" E	27° 14' 59.236" N	39.35	176935.17	20°37'38"®	1231.482
3477	TP3463	657984.060	3015148.483	88° 35' 44.747" E	27° 15' 0.502" N	35.07	176974.53	0°28'29"(L)	1230.811
3478	TP3464	657988.228	3015183.309	88° 35' 44.915" E	27° 15' 1.631" N	39.36	177009.60	8°23'52"(L)	1229.923
3479	TP3465	657987.147	3015222.658	88° 35' 44.894" E	27° 15' 2.910" N	21.47	177048.97	5°56'21"(L)	1229.308
3480	TP3466	657984.341	3015243.940	88° 35' 44.801" E	27° 15' 3.603" N	11.84	177070.43	81°38'35"®	1229.011
3481	TP3466A	657995.731	3015247.178	88° 35' 45.217" E	27° 15' 3.703" N	8.22	177082.27	25°21'36"®	1229.011
3482	TP3467	658003.841	3015245.822	88° 35' 45.511" E	27° 15' 3.656" N	60.41	177090.49	82°53'23"(R)	1227.274
3483	TP3468	658001.332	3015185.469	88° 35' 45.392" E	27° 15' 1.696" N	70.37	177150.90	1°23'51"(R)	1226.111
3484	TP3469	657996.695	3015115.253	88° 35' 45.191" E	27° 14' 59.417" N	37.72	177221.27	47°3'56"(L)	1225.161
3485	TP3470	658022.558	3015087.796	88° 35' 46.118" E	27° 14' 58.514" N	35.00	177258.99	8°4'56"(L)	1224.029
3486	TP3471	658049.896	3015065.948	88° 35' 47.102" E	27° 14' 57.793" N	27.72	177293.99	11°13'11"(L)	1223.184
3487	TP3472	658074.509	3015053.184	88° 35' 47.991" E	27° 14' 57.368" N	27.61	177321.71	23°34'3"(L)	1222.894
3488	TP3473	658102.057	3015051.333	88° 35' 48.991" E	27° 14' 57.296" N	36.96	177349.32	16°16'46"®	1222.602
3489	TP3474	658136.760	3015038.618	88° 35' 50.247" E	27° 14' 56.869" N	32.82	177386.28	34°33'48"(R)	1221.379
3490	TP3475	658155.730	3015011.839	88° 35' 50.924" E	27° 14' 55.991" N	39.32	177419.10	10°56'50"(L)	1221.052
3491	TP3476	658184.142	3014984.651	88° 35' 51.944" E	27° 14' 55.096" N	35.06	177458.42	16°14'6"(R)	1220.025
3492	TP3477	658201.685	3014954.299	88° 35' 52.568" E	27° 14' 54.103" N	31.25	177493.48	22°59'26"(L)	1219.102
3493	TP3478	658226.650	3014935.498	88° 35' 53.467" E	27° 14' 53.481" N	31.70	177524.73	16°32'51"(L)	1216.951
3494	TP3479	658256.356	3014924.429	88° 35' 54.541" E	27° 14' 53.109" N	45.11	177556.43	33°56'33"(R)	1215.358
3495	TP3480	658282.628	3014887.762	88° 35' 55.479" E	27° 14' 51.907" N	101.29	177601.54	23°28'38"(L)	1213.675
3496	TP3481	658369.540	3014835.744	88° 35' 58.614" E	27° 14' 50.181" N	67.24	177702.83	11°4'11"(R)	1209.990
3497	TP3482	658419.535	3014790.774	88° 36' 0.411" E	27° 14' 48.699" N	90.25	177770.07	26°34'15"(L)	1297.141
3498	TP3483	658506.545	3014766.808	88° 36' 3.562" E	27° 14' 47.885" N	55.17	177860.32	2°54'53"(L)	1206.312

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
3499	TP3484	658560.407	3014754.881	88° 36' 5.515" E	27° 14' 47.475" N	37.77	177915.49	36°33'59"(L)	1206.095
3500	TP3485	658594.891	3014770.293	88° 36' 6.776" E	27° 14' 47.961" N	26.80	177953.26	15°57'2"(L)	1204.823
3501	TP3486	658615.410	3014787.529	88° 36' 7.529" E	27° 14' 48.512" N	40.30	177980.06	40°24'9"(R)	1203.593
3502	TP3487	658655.711	3014787.268	88° 36' 8.994" E	27° 14' 48.487" N	16.89	178020.36	40°43'47"(L)	1202.647
3503	TP3488	658668.583	3014798.207	88° 36' 9.467" E	27° 14' 48.837" N	30.93	178037.25	10°10'57"(L)	1202.221
3504	TP3489	658688.240	3014822.088	88° 36' 10.193" E	27° 14' 49.605" N	26.79	178068.19	28°43'37"®	1200.453
3505	TP3490	658713.115	3014832.045	88° 36' 11.102" E	27° 14' 49.918" N	154.75	178094.98	21°4'23"(R)	1199.371
3506	TP3491	658867.854	3014834.047	88° 36' 16.727" E	27° 14' 49.919" N	6.89	178249.73	24°29'43"(L)	1195.103
3507	TP3492	658874.083	3014836.983	88° 36' 16.955" E	27° 14' 50.011" N	12.37	178256.62	28°21'3"(L)	1195.841
3508	TP3493	658881.425	3014846.937	88° 36' 17.227" E	27° 14' 50.332" N	37.89	178268.99	27°49'48"(L)	1194.224
3509	TP3494	658887.080	3014884.403	88° 36' 17.450" E	27° 14' 51.547" N	39.05	178306.88	26°17'59"(L)	1192.145
3510	TP3495	658875.196	3014921.603	88° 36' 17.035" E	27° 14' 52.760" N	20.30	178345.93	26°17'59"(L)	1189.879
3511	TP3496	658883.382	3014940.181	88° 36' 17.341" E	27° 14' 53.360" N	63.18	178366.23	18°8'26"(R)	1189.882
3512	TP3497	658925.594	3014987.195	88° 36' 18.898" E	27° 14' 54.870" N	18.01	178429.41	23°0'14"(L)	1187.696
3513	TP3498	658931.433	3015004.233	88° 36' 19.118" E	27° 14' 55.421" N	77.83	178447.42	32°52'19"(L)	1186.997
3514	TP3499	658912.663	3015079.762	88° 36' 18.471" E	27° 14' 57.883" N	69.72	178525.25	28°45'51"(R)	1183.531
3515	TP3500	658930.481	3015147.163	88° 36' 19.150" E	27° 15' 0.065" N	45.76	178594.97	4°51'29"(L)	1180.051
3516	TP3501	658938.387	3015192.230	88° 36' 19.458" E	27° 15' 1.526" N	36.54	178640.72	47°51'50"(R)	1177.895
3517	TP3502	658969.312	3015211.694	88° 36' 20.592" E	27° 15' 2.146" N	22.13	178677.26	9°48'52"(L)	1177.091
3518	TP3503	658985.761	3015226.505	88° 36' 21.197" E	27° 15' 2.620" N	3.80	178699.40	84°54'21"(L)	1176.251
3519	TP3504	658983.478	3015229.544	88° 36' 21.115" E	27° 15' 2.720" N	9.20	178703.20	4°51'58"(L)	1175.403
3520	TP3505	658976.523	3015235.564	88° 36' 20.865" E	27° 15' 2.918" N	22.57	178712.40	65°27'30"(L)	1174.782
3521	TP3506	658955.994	3015226.174	88° 36' 20.114" E	27° 15' 2.622" N	30.69	178734.97	9°27'23"(L)	1173.753
3522	TP3507	658930.558	3015208.993	88° 36' 19.182" E	27° 15' 2.074" N	53.94	178765.67	14°18'46"(L)	1172.567
3523	TP3508	658894.712	3015168.692	88° 36' 17.860" E	27° 15' 0.780" N	29.66	178819.60	22°29'54"(R)	1170.389
3524	TP3509	658868.021	3015155.759	88° 36' 16.884" E	27° 15' 0.371" N	53.15	178849.26	40°20'47"(L)	1168.350
3525	TP3510	658846.571	3015107.133	88° 36' 16.081" E	27° 14' 58.800" N	36.05	178902.41	16°18'42"(L)	1165.529
3526	TP3511	658841.871	3015071.387	88° 36' 15.894" E	27° 14' 57.640" N	17.84	178938.46	21°46'47"(L)	1163.325
3527	TP3512	658846.273	3015054.103	88° 36' 16.046" E	27° 14' 57.077" N	36.77	178956.30	3°36'59"(R)	1162.406
3528	TP3513	658853.083	3015017.968	88° 36' 16.276" E	27° 14' 55.900" N	10.26	178993.07	79°46'3"(R)	1160.529
3529	TP3514	658842.959	3015016.329	88° 36' 15.907" E	27° 14' 55.851" N	15.82	179003.32	79°46'3"R)	1159.064
3530	TP3515	658841.910	3015032.114	88° 36' 15.877" E	27° 14' 56.365" N	31.40	179019.14	20°34'6"(L)	1158.235
3531	TP3516	658828.953	3015060.717	88° 36' 15.419" E	27° 14' 57.299" N	67.00	179050.55	7°16'39"(R)	1156.846
3532	TP3517	658809.259	3015124.762	88° 36' 14.733" E	27° 14' 59.388" N	68.36	179117.55	42°9'58"(R)	1154.958
3533	TP3518	658838.228	3015186.679	88° 36' 15.815" E	27° 15' 1.388" N	71.76	179185.91	7°5'33"(L)	1152.421
3534	TP3519	658860.380	3015254.933	88° 36' 16.652" E	27° 15' 3.596" N	29.86	179257.67	8°18'52"(R)	1147.756
3535	TP3520	658873.609	3015281.704	88° 36' 17.145" E	27° 15' 4.460" N	26.56	179287.53	25°30'20"(R)	1145.721
3536	TP3521	658894.484	3015298.131	88° 36' 17.912" E	27° 15' 4.985" N	41.63	179314.09	14°10'11"(R)	1143.401
3537	TP3522	658932.510	3015315.085	88° 36' 19.302" E	27° 15' 5.520" N	36.97	179355.73	19°7'43"(L)	1140.629
3538	TP3523	658959.480	3015340.374	88° 36' 20.294" E	27° 15' 6.331" N	47.43	179392.70	28°18'33"(R)	1138.086
3539	TP3524	659005.330	3015352.530	88° 36' 21.967" E	27° 15' 6.706" N	31.55	179440.13	35°43'15"(L)	1134.298
3540	TP3525	659025.371	3015376.902	88° 36' 22.707" E	27° 15' 7.490" N	70.75	179471.69	19°40'53"(L)	1131.208
3541	TP3526	659049.278	3015443.492	88° 36' 23.607" E	27° 15' 9.643" N	25.61	179542.44	24°41'5"(R)	1127.129
3542	TP3527	659067.209	3015461.781	88° 36' 24.267" E	27° 15' 10.230" N	20.46	179568.05	51°53'44"(R)	1125.647
3543	TP3528	659087.548	3015459.525	88° 36' 25.005" E	27° 15' 10.148" N	76.92	179588.51	24°58'49"(L)	1125.176
3544	TP3529	659153.269	3015419.551	88° 36' 27.376" E	27° 15' 8.822" N	80.36	179665.44	18°44'14"(L)	1117.958
3545	TP3530	659231.701	3015402.059	88° 36' 30.219" E	27° 15' 8.221" N	15.32	179745.80	45°16'46"(L)	1113.702
3546	TP3531	659244.595	3015410.339	88° 36' 30.691" E	27° 15' 8.485" N	26.96	179761.12	81°41'17"(L)	1113.457
3547	TP3532	659233.458	3015434.896	88° 36' 30.298" E	27° 15' 9.287" N	31.32	179788.08	56°3'9"(L)	1111.844
3548	TP3533	659202.570	3015440.094	88° 36' 29.178" E	27° 15' 9.469" N	73.39	179819.41	25°45'16"(R)	1106.795
3549	TP3534	659142.681	3015482.508	88° 36' 27.020" E	27° 15' 10.872" N	28.05	179892.79	14°43'1"®	1101.374
3550	TP3535	659124.658	3015504.006	88° 36' 26.375" E	27° 15' 11.578" N	53.41	179920.85	5°11'42"(R)	1098.952
3551	TP3536	659094.191	3015547.873	88° 36' 25.288" E	27° 15' 13.016" N	14.15	179974.26	84°30'1"(L)	1096.357
3552	TP3537	659081.846	3015540.951	88° 36' 24.836" E	27° 15' 12.796" N	49.00	179988.41	22°30'36"(R)	1094.291
3553	TP3538	659033.184	3015535.173	88° 36' 23.065" E	27° 15' 12.629" N	92.98	180037.41	29°34'45"(R)	1090.656
3554	TP3539	658947.476	3015571.215	88° 36' 19.966" E	27° 15' 13.835" N	37.28	180130.39	19°38'29"(L)	1084.438
3555	TP3540	658910.254	3015573.274	88° 36' 18.613" E	27° 15' 13.918" N	22.67	180167.67	50°13'25"(L)	1081.345
3556	TP3541	658894.808	3015556.678	88° 36' 18.044" E	27° 15' 13.385" N	28.07	180190.34	10°8'54"(L)	1080.336
3557	TP3542	658879.606	3015533.084	88° 36' 17.481" E	27° 15' 12.625" N	69.05	180218.41	9°52'1"(R)	1078.633
3558	TP3543	658832.815	3015482.309	88° 36' 15.756" E	27° 15' 10.995" N	14.82	180287.46	9°52'1"®	1074.248
3559	TP3544	658826.344	3015468.977	88° 36' 15.515" E	27° 15' 10.564" N	45.23	180302.28	13°21'27"(L)	1073.391
3560	TP3545	658816.528	3015424.821	88° 36' 15.137" E	27° 15' 9.134" N	42.11	180347.51	33°37'29"®	1070.207
3561	TP3546	658786.154	3015395.651	88° 36' 14.019" E	27° 15' 8.199" N	20.06	180389.62	61°1'52"®	1068.959
3562	TP3547	658768.232	3015404.673	88° 36' 13.372" E	27° 15' 8.499" N	69.31	180409.69	85°47'48"(R)	1066.480
3563	TP3548	658794.779	3015468.700	88° 36' 14.367" E	27° 15' 10.568" N	99.73	180479.00	1°58'13"(L)	1058.732
3564	TP3549	658829.787	3015562.086	88° 36' 15.683" E	27° 15' 13.588" N	57.38	180578.73	16°31'20"(L)	1052.103

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
3565	TP3550	658833.817	3015619.328	88° 36' 15.856" E	27° 15' 15.446" N	31.03	180636.12	7°8'57"(R)	1045.914
3566	TP3551	658839.831	3015649.766	88° 36' 16.089" E	27° 15' 16.432" N	8.97	180667.14	89°35'39"(L)	1042.621
3567	TP3552	658831.046	3015651.566	88° 36' 15.771" E	27° 15' 16.494" N	22.45	180676.11	0°41'51"(L)	1041.464
3568	TP3553	658808.633	3015652.802	88° 36' 14.956" E	27° 15' 16.544" N	22.65	180698.56	61°47'7"(L)	1038.629
3569	TP3554	658796.841	3015633.461	88° 36' 14.519" E	27° 15' 15.920" N	28.40	180721.21	20°42'8"(L)	1036.253
3570	TP3555	658791.584	3015605.554	88° 36' 14.315" E	27° 15' 15.016" N	15.08	180749.61	84°7'57"(R)	1032.821
3571	TP3556	658776.555	3015606.816	88° 36' 13.769" E	27° 15' 15.063" N	25.12	180764.69	59°29'40"(R)	1030.016
3572	TP3557	658773.279	3015631.720	88° 36' 13.661" E	27° 15' 15.874" N	20.70	180789.81	12°6'57"®	1027.381
3573	TP3558	658774.947	3015652.350	88° 36' 13.732" E	27° 15' 16.543" N	36.90	180810.50	26°53'52"(R)	1025.627
3574	TP3559	658794.235	3015683.802	88° 36' 14.447" E	27° 15' 17.557" N	14.65	180847.40	84°53'21"(L)	1022.852
3575	TP3560	658782.477	3015692.544	88° 36' 14.024" E	27° 15' 17.846" N	25.31	180862.05	65°39'54"(L)	1019.027
3576	TP3561	658761.866	3015677.858	88° 36' 13.268" E	27° 15' 17.377" N	26.07	180887.36	31°51'52"(L)	1015.361
3577	TP3562	658751.820	3015653.801	88° 36' 12.892" E	27° 15' 16.600" N	14.04	180913.43	77°51'24"®	1012.201
3578	TP3563	658738.019	3015656.364	88° 36' 12.391" E	27° 15' 16.689" N	37.70	180927.47	89°22'19"(R)	1011.152
3579	TP3564	658744.496	3015693.501	88° 36' 12.644" E	27° 15' 17.893" N	19.94	180965.16	24°23'46"(R)	1007.085
3580	TP3565	658755.732	3015709.979	88° 36' 13.060" E	27° 15' 18.424" N	16.75	180985.11	89°0'19"(L)	1002.280
3581	TP3566	658742.060	3015719.654	88° 36' 12.567" E	27° 15' 18.744" N	13.14	181001.86	69°2'27"(L)	1000.812
3582	TP3567	658732.653	3015710.486	88° 36' 12.221" E	27° 15' 18.450" N	26.01	181014.99	24°54'13"(L)	999.738
3583	TP3568	658723.401	3015686.173	88° 36' 11.874" E	27° 15' 17.664" N	8.67	181041.01	74°55'6"®	997.825
3584	TP3569	658714.777	3015687.042	88° 36' 11.560" E	27° 15' 17.695" N	45.47	181049.68	85°35'39"(R)	996.422
3585	TP3570	658715.845	3015732.498	88° 36' 11.620" E	27° 15' 19.172" N	37.70	181095.14	48°3'56"(R)	989.137
3586	TP3571	658744.475	3015757.027	88° 36' 12.673" E	27° 15' 19.957" N	17.84	181132.84	6°1'20"(L)	984.147
3587	TP3572	658756.727	3015769.988	88° 36' 13.124" E	27° 15' 20.373" N	22.55	181150.68	46°34'12"(R)	982.842
3588	TP3573	658779.277	3015770.004	88° 36' 13.944" E	27° 15' 20.364" N	32.33	181173.23	24°37'14"(R)	981.329
3589	TP3574	658808.675	3015756.557	88° 36' 15.006" E	27° 15' 19.915" N	30.46	181205.56	34°0'24"(L)	980.099
3590	TP3575	658838.724	3015761.546	88° 36' 16.101" E	27° 15' 20.064" N	19.41	181236.02	9°45'32"(L)	978.045
3591	TP3576	658857.054	3015767.924	88° 36' 16.770" E	27° 15' 20.264" N	47.88	181255.43	52°51'38"(L)	977.105
3592	TP3577	658871.813	3015813.471	88° 36' 17.328" E	27° 15' 21.738" N	18.57	181303.30	12°5'50"(L)	976.786
3593	TP3578	658873.707	3015831.939	88° 36' 17.406" E	27° 15' 22.337" N	30.82	181321.87	69°35'31"(L)	976.629
3594	TP3579	658846.072	3015845.576	88° 36' 16.407" E	27° 15' 22.791" N	26.61	181352.69	38°3'49"(L)	976.121
3595	TP3580	658820.020	3015840.134	88° 36' 15.458" E	27° 15' 22.625" N	41.00	181379.30	29°34'2"(R)	975.526
3596	TP3581	658780.973	3015852.647	88° 36' 14.044" E	27° 15' 23.048" N	29.80	181420.30	32°0'3"(L)	973.368
3597	TP3582	658752.091	3015845.321	88° 36' 12.991" E	27° 15' 22.822" N	22.46	181450.10	15°8'9"(L)	972.981
3598	TP3583	658732.519	3015834.307	88° 36' 12.274" E	27° 15' 22.473" N	28.91	181472.56	12°5'0"®	972.581
3599	TP3584	658704.911	3015825.716	88° 36' 11.266" E	27° 15' 22.205" N	21.71	181501.47	14°9'41"(R)	971.570
3600	TP3585	658683.232	3015824.533	88° 36' 10.478" E	27° 15' 22.175" N	28.00	181523.18	25°8'23"(R)	970.871
3601	TP3586	658657.277	3015835.028	88° 36' 9.539" E	27° 15' 22.527" N	27.42	181551.18	23°20'40"(R)	968.724
3602	TP3587	658638.008	3015854.541	88° 36' 8.848" E	27° 15' 23.169" N	108.53	181578.60	46°56'55"(R)	967.255
3603	TP3588	658642.381	3015962.987	88° 36' 9.057" E	27° 15' 26.691" N	23.87	181687.14	5°39'50"(L)	961.358
3604	TP3589	658640.984	3015986.820	88° 36' 9.017" E	27° 15' 27.466" N	77.57	181711.01	10°10'40"(L)	960.592
3605	TP3590	658622.834	3016062.233	88° 36' 8.393" E	27° 15' 29.923" N	31.73	181788.58	17°22'24"(R)	956.024
3606	TP3591	658624.959	3016093.888	88° 36' 8.485" E	27° 15' 30.951" N	7.76	181820.30	86°16'8"(L)	955.315
3607	TP3592	658617.265	3016094.911	88° 36' 8.206" E	27° 15' 30.987" N	12.76	181828.07	10°32'19"(L)	953.811
3608	TP3593	658604.543	3016093.982	88° 36' 7.743" E	27° 15' 30.962" N	15.76	181840.82	87°55'21"(L)	953.421
3609	TP3594	658605.120	3016078.235	88° 36' 7.756" E	27° 15' 30.451" N	65.26	181856.58	10°58'7"(L)	952.723
3610	TP3595	658619.874	3016014.668	88° 36' 8.263" E	27° 15' 28.379" N	6.98	181921.84	88°32'7"(R)	950.247
3611	TP3596	658613.122	3016012.918	88° 36' 8.017" E	27° 15' 28.325" N	15.70	181928.81	9°44'19"(R)	949.303
3612	TP3597	658597.440	3016013.660	88° 36' 7.447" E	27° 15' 28.356" N	45.43	181944.51	80°13'48"(L)	948.721
3613	TP3598	658591.856	3016058.743	88° 36' 7.265" E	27° 15' 29.823" N	48.33	181989.94	2°12'54"(L)	946.583
3614	TP3599	658584.066	3016106.441	88° 36' 7.004" E	27° 15' 31.376" N	35.67	182038.27	26°47'51"®	943.979
3615	TP3600	658594.804	3016140.452	88° 36' 7.410" E	27° 15' 32.476" N	49.20	182073.93	26°33'11"(R)	942.313
3616	TP3601	658629.025	3016175.796	88° 36' 8.671" E	27° 15' 33.610" N	26.88	182123.13	18°57'2"(L)	941.248
3617	TP3602	658640.438	3016200.133	88° 36' 9.097" E	27° 15' 34.396" N	49.56	182150.01	17°5'44"(R)	939.443
3618	TP3603	658673.740	3016236.834	88° 36' 10.325" E	27° 15' 35.575" N	27.88	182199.57	43°22'1"(L)	937.593
3619	TP3604	658673.182	3016264.708	88° 36' 10.317" E	27° 15' 36.481" N	89.85	182227.45	54°19'1"(L)	937.524
3620	TP3605	658599.170	3016315.644	88° 36' 7.651" E	27° 15' 38.166" N	57.69	182317.29	7°47'27"(L)	932.004
3621	TP3606	658547.650	3016341.607	88° 36' 5.790" E	27° 15' 39.031" N	36.54	182374.99	32°10'52"(R)	929.425
3622	TP3607	658528.789	3016372.906	88° 36' 5.118" E	27° 15' 40.056" N	20.35	182411.53	41°26'52"(R)	928.839
3623	TP3608	658532.453	3016392.920	88° 36' 5.261" E	27° 15' 40.705" N	37.63	182431.87	24°15'48"(L)	928.831
3624	TP3609	658523.421	3016429.447	88° 36' 4.950" E	27° 15' 41.895" N	82.43	182469.50	24°53'24"(L)	928.656
3625	TP3610	658471.793	3016493.708	88° 36' 3.103" E	27° 15' 44.004" N	12.69	182551.93	22°55'18"(L)	927.317
3626	TP3611	658460.615	3016499.726	88° 36' 2.699" E	27° 15' 44.204" N	28.31	182564.63	14°36'39"(L)	926.694
3627	TP3612	658433.113	3016506.425	88° 36' 1.702" E	27° 15' 44.434" N	18.52	182592.93	41°9'52"®	924.583
3628	TP3613	658422.449	3016521.572	88° 36' 1.322" E	27° 15' 44.930" N	49.90	182611.46	56°35'27"(R)	924.224
3629	TP3614	658440.691	3016568.015	88° 36' 2.006" E	27° 15' 46.431" N	14.42	182661.36	7°28'55"(R)	921.321
3630	TP3615	658447.664	3016580.633	88° 36' 2.266" E	27° 15' 46.838" N	31.29	182675.77	60°49'56"(R)	920.306

Annexure - A: Details of TPs along the Pipeline Route

S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
3631	TP3616	658478.955	3016580.765	88° 36' 3.404" E	27° 15' 46.830" N	3.75	182707.06	55°31'35"(L)	919.549
3632	TP3617	658481.067	3016583.869	88° 36' 3.482" E	27° 15' 46.930" N	27.26	182710.82	20°13'32"(L)	919.472
3633	TP3618	658487.664	3016610.316	88° 36' 3.734" E	27° 15' 47.786" N	15.14	182738.08	21°19'49"(L)	918.501
3634	TP3619	658485.734	3016625.336	88° 36' 3.671" E	27° 15' 48.275" N	40.94	182753.22	36°55'55"(L)	917.583
3635	TP3620	658457.166	3016654.655	88° 36' 2.646" E	27° 15' 49.239" N	43.34	182794.15	8°47'33"(L)	914.916
3636	TP3621	658422.533	3016680.707	88° 36' 1.399" E	27° 15' 50.100" N	22.02	182837.49	16°9'3"(R)	912.842
3637	TP3622	658409.310	3016698.320	88° 36' 0.926" E	27° 15' 50.678" N	33.87	182859.52	7°36'58"(R)	911.824
3638	TP3623	658392.745	3016727.861	88° 36' 0.338" E	27° 15' 51.645" N	28.83	182893.38	20°32'2"(L)	910.627
3639	TP3624	658370.723	3016746.461	88° 35' 59.546" E	27° 15' 52.258" N	16.57	182922.21	20°32'2"(L)	908.912
3640	TP3625	658361.051	3016759.917	88° 35' 59.200" E	27° 15' 52.699" N	51.33	182938.78	15°48'5"(R)	908.152
3641	TP3626	658343.574	3016808.179	88° 35' 58.587" E	27° 15' 54.274" N	76.98	182990.11	4°6'5"(R)	905.066
3642	TP3627	658322.606	3016882.252	88° 35' 57.860" E	27° 15' 56.690" N	32.83	183067.09	10°12'17"(L)	901.379
3643	TP3628	658308.211	3016911.753	88° 35' 57.350" E	27° 15' 57.654" N	59.30	183099.92	18°23'24"(L)	900.342
3644	TP3629	658266.723	3016954.119	88° 35' 55.861" E	27° 15' 59.048" N	24.40	183159.22	41°26'9"(L)	897.460
3645	TP3630	658242.384	3016955.891	88° 35' 54.977" E	27° 15' 59.116" N	34.23	183183.62	22°40'27"(L)	895.824
3646	TP3631	658209.925	3016945.024	88° 35' 53.792" E	27° 15' 58.776" N	12.18	183217.85	56°3'50"(R)	893.736
3647	TP3632	658200.266	3016952.450	88° 35' 53.444" E	27° 15' 59.021" N	29.71	183230.03	37°23'52"(R)	892.956
3648	TP3633	658192.552	3016981.142	88° 35' 53.177" E	27° 15' 59.957" N	29.97	183259.74	6°4'38"(L)	891.639
3649	TP3634	658181.751	3017009.096	88° 35' 52.798" E	27° 16' 0.869" N	40.15	183289.71	17°52'0"(L)	890.325
3650	TP3635	658156.487	3017040.303	88° 35' 51.894" E	27° 16' 1.894" N	80.15	183329.86	23°52'45"(L)	887.891
3651	TP3636	658085.151	3017076.852	88° 35' 49.317" E	27° 16' 3.111" N	51.20	183410.02	9°9'30"(L)	883.628
3652	TP3637	658036.450	3017092.648	88° 35' 47.554" E	27° 16' 3.644" N	49.34	183461.22	38°42'26"(R)	880.447
3653	TP3638	658009.345	3017133.876	88° 35' 46.587" E	27° 16' 4.995" N	29.75	183510.56	9°12'53"(L)	878.504
3654	TP3639	657989.230	3017155.799	88° 35' 45.866" E	27° 16' 5.715" N	42.56	183540.31	25°12'35"(L)	876.715
3655	TP3640	657949.836	3017171.918	88° 35' 44.441" E	27° 16' 6.255" N	82.90	183582.87	1°12'58"(L)	874.534
3656	TP3641	657872.458	3017201.678	88° 35' 41.642" E	27° 16' 7.254" N	78.50	183665.78	22°9'46"(L)	870.036
3657	TP3642	657793.970	3017200.136	88° 35' 38.788" E	27° 16' 7.237" N	26.86	183744.28	5°47'58"(L)	865.205
3658	TP3643	657767.304	3017196.897	88° 35' 37.817" E	27° 16' 7.143" N	26.57	183771.14	13°21'45"(L)	863.516
3659	TP3644	657740.901	3017199.876	88° 35' 36.858" E	27° 16' 7.250" N	11.32	183797.71	45°35'59"(R)	861.224
3660	TP3645	657733.935	3017208.804	88° 35' 36.609" E	27° 16' 7.543" N	53.79	183809.04	40°50'25"(R)	860.759
3661	TP3646	657736.635	3017262.522	88° 35' 36.732" E	27° 16' 9.287" N	19.58	183862.82	46°44'49"(R)	858.083
3662	TP3647	657751.548	3017275.203	88° 35' 37.280" E	27° 16' 9.693" N	22.55	183882.40	28°19'32"(R)	858.120
3663	TP3648	657773.598	3017279.910	88° 35' 38.084" E	27° 16' 9.837" N	51.95	183904.95	8°50'39"(R)	856.829
3664	TP3649	657825.462	3017282.815	88° 35' 39.971" E	27° 16' 9.910" N	28.61	183956.89	14°26'6"(L)	854.925
3665	TP3650	657852.729	3017291.486	88° 35' 40.966" E	27° 16' 10.180" N	35.68	183985.50	10°53'25"(L)	852.904
3666	TP3651	657884.072	3017308.526	88° 35' 42.114" E	27° 16' 10.721" N	48.48	184021.18	14°32'11"(L)	851.378
3667	TP3652	657919.490	3017341.632	88° 35' 43.417" E	27° 16' 11.782" N	49.47	184069.66	43°16'30"(R)	848.366
3668	TP3653	657968.958	3017341.453	88° 35' 45.215" E	27° 16' 11.756" N	17.99	184119.13	16°42'9"(L)	846.103
3669	TP3654	657986.207	3017346.561	88° 35' 45.845" E	27° 16' 11.914" N	13.55	184137.12	82°5'16"(L)	845.167
3670	TP3655	657984.185	3017359.960	88° 35' 45.777" E	27° 16' 12.350" N	9.43	184150.67	38°17'51"(L)	845.271
3671	TP3656	657977.303	3017366.404	88° 35' 45.530" E	27° 16' 12.563" N	25.74	184160.10	57°3'12"(L)	844.193
3672	TP3657	657952.321	3017360.206	88° 35' 44.619" E	27° 16' 12.372" N	51.09	184185.84	3°30'29"(R)	843.317
3673	TP3658	657902.070	3017350.960	88° 35' 42.788" E	27° 16' 12.092" N	56.66	184236.93	25°54'34"(L)	841.744
3674	TP3659	657856.423	3017317.386	88° 35' 41.113" E	27° 16' 11.020" N	28.41	184293.59	26°27'50"(R)	839.269
3675	TP3660	657828.436	3017312.516	88° 35' 40.093" E	27° 16' 10.874" N	63.88	184322.00	16°24'19"(R)	838.427
3676	TP3661	657764.973	3017319.785	88° 35' 37.789" E	27° 16' 11.136" N	48.14	184385.88	15°16'45"(L)	835.526
3677	TP3662	657717.389	3017312.465	88° 35' 36.055" E	27° 16' 10.918" N	19.78	184434.02	86°10'6"(R)	832.485
3678	TP3663	657713.082	3017331.772	88° 35' 35.908" E	27° 16' 11.547" N	50.57	184453.80	88°31'7"®	831.504
3679	TP3664	657763.584	3017334.361	88° 35' 37.745" E	27° 16' 11.610" N	52.61	184504.37	4°42'47"(R)	829.529
3680	TP3665	657816.162	3017332.462	88° 35' 39.656" E	27° 16' 11.527" N	19.22	184556.99	14°9'45"(L)	828.815
3681	TP3666	657834.951	3017336.488	88° 35' 40.341" E	27° 16' 11.650" N	13.16	184576.20	17°44'54"(L)	827.945
3682	TP3667	657846.370	3017343.039	88° 35' 40.759" E	27° 16' 11.858" N	25.06	184589.37	17°2'44"(L)	827.456
3683	TP3668	657863.500	3017361.337	88° 35' 41.390" E	27° 16' 12.445" N	31.50	184614.43	5°6'55"(L)	826.516
3684	TP3669	657882.889	3017386.157	88° 35' 42.107" E	27° 16' 13.244" N	44.05	184645.93	43°13'51"(R)	825.222
3685	TP3670	657926.428	3017392.876	88° 35' 43.693" E	27° 16' 13.444" N	86.45	184689.98	14°31'20"(L)	822.942
3686	TP3671	658005.828	3017427.063	88° 35' 46.596" E	27° 16' 14.522" N	113.72	184776.43	12°28'55"(L)	819.345
3687	TP3672	658098.085	3017493.545	88° 35' 49.981" E	27° 16' 16.643" N	2.76	184890.14	47°23'12"(L)	814.236
3688	TP3673	658098.413	3017496.281	88° 35' 49.994" E	27° 16' 16.732" N	16.58	184892.90	23°1'11"(L)	814.097
3689	TP3674	658093.791	3017512.207	88° 35' 49.833" E	27° 16' 17.251" N	20.29	184909.48	46°24'37"(L)	813.315
3690	TP3675	658075.777	3017521.547	88° 35' 49.183" E	27° 16' 17.562" N	29.51	184929.77	10°1'23"(L)	812.194
3691	TP3676	658047.612	3017530.364	88° 35' 48.163" E	27° 16' 17.860" N	13.34	184959.29	20°59'10"(L)	811.955
3692	TP3677	658034.302	3017529.526	88° 35' 47.678" E	27° 16' 17.839" N	35.22	184972.62	6°2'21"(L)	811.690
3693	TP3678	657999.579	3017523.627	88° 35' 46.413" E	27° 16' 17.661" N	76.37	185007.84	50°53'59"(R)	810.264
3694	TP3679	657942.171	3017573.986	88° 35' 44.349" E	27° 16' 19.321" N	31.14	185084.21	15°59'50"(R)	804.922
3695	TP3680	657925.325	3017600.181	88° 35' 43.749" E	27° 16' 20.179" N	21.73	185115.35	36°1'44"(R)	803.628
3696	TP3681	657926.570	3017621.879	88° 35' 43.804" E	27° 16' 20.884" N	48.13	185137.09	32°28'31"(L)	803.427

Annexure - A: Details of TPs along the Pipeline Route									
S.No.	TP No.	EASTING (M)	NORTHING (M)	LATITUDE (DMS)	LONGITUDE (DMS)	DISTANCE (M)	CHAINAGE (M)	Diflection angle (DIRECTION)	REDUCED LEVEL (M)
3697	TP3682	657903.095	3017663.898	88° 35' 42.970" E	27° 16' 22.259" N	47.30	185185.22	23°45'47"(R)	801.498
3698	TP3683	657898.620	3017710.990	88° 35' 42.829" E	27° 16' 23.791" N	84.15	185232.52	24°47'17"(R)	797.960
3699	TP3684	657926.517	3017790.385	88° 35' 43.881" E	27° 16' 26.359" N	28.22	185316.68	6°4'58"(R)	794.511
3700	TP3685	657938.642	3017815.871	88° 35' 44.333" E	27° 16' 27.181" N	141.03	185344.90	2°28'46"(L)	792.967
3701	TP3686	657993.664	3017945.725	88° 35' 46.394" E	27° 16' 31.377" N	41.20	185485.93	9°57'12"(L)	795.809
3702	TP3687	658002.940	3017985.870	88° 35' 46.750" E	27° 16' 32.678" N	46.38	185527.13	33°44'21"(L)	796.733
3703	TP3688	657986.522	3018029.252	88° 35' 46.173" E	27° 16' 34.094" N	46.04	185573.52	14°40'13"(R)	801.976
3704	TP3689	657981.663	3018075.030	88° 35' 46.018" E	27° 16' 35.583" N		185618.38		804.288

Annexure - B: - List of Established DGPS Control Popints				
S. No.	Point ID.	EASTING (M)	NORTHING (M)	MSL (M)
1	GCP30	657162.991	2940932.953	94.670
2	GCP30A	657172.451	2940932.953	94.907
3	GCP36	660117.563	2946324.180	95.902
4	GCP36A	660123.945	2946329.185	95.944
5	GCP29	662721.613	2947951.588	100.391
6	GCP29A	662722.785	2947961.094	100.722
7	GCP35	667031.949	2955984.358	102.897
8	GCP35A	667031.760	2955991.758	103.367
9	GCP34	668533.256	2960967.039	115.352
10	GCP34A	668501.191	2961042.099	115.234
11	GCP33	668853.337	2964740.946	118.129
12	GCP33A	668853.848	2964745.619	118.389
13	GCP32	665628.423	2969845.471	147.663
14	GCP32A	665637.809	2969885.264	147.771
15	GCP31	663207.883	2972978.158	166.746
16	GCP31A	663203.557	2972956.920	166.803
17	GCP2	658872.5049	2973569.084	168.22
18	GCP2A	658841.8917	2973556.871	168.32
19	GCP4	655168.5945	2978194.472	623.63
20	GCP4A	655193.8452	2978159.016	619.79
21	GCP5	654636.0466	2980572.389	683.41
22	GCP5A	654629.6745	2980644.101	688.17
23	GCP7	653800.9968	2981509.479	947.45
24	GCP7A	653776.1382	2981582.181	953.31
25	GCP8	655153.3847	2983865.271	1171.06
26	GCP8A	655181.4016	2983872.764	1172.51
27	GCP9	655548.9929	2985568.956	1447.02
28	GCP9A	655543.3985	2985576.455	1450.36
29	GCP10	654396.7896	2987109.703	1827.03
30	GCP10A	654432.8722	2987183.693	1832.53
31	GCP11	655266.63	2989563.818	1687.61
32	GCP11A	655286.2182	2989577.285	1687.44
33	GCP12	657037.0932	2992354.202	1497.36
34	GCP12A	657033.5841	2992376.412	1497.78
35	GCP15	657288.553	2993850.543	1634.43
36	GCP15A	657269.5006	2993839.18	1634.86
37	GCP13	660677.6091	2994892.379	2037.56
38	GCP13A	660680.6941	2994881.477	2038.93
39	GCP14	657288.294	2993850.77	1634.61
40	GCP14A	657273.2849	2993837.83	1635.08
41	GCP16	659724.1084	2998184.828	1848.67
42	GCP16A	659730.3055	2998188.715	1849.03
43	GCP17	657568.7446	3000674.589	1734.53

Annexure - B: - List of Established DGPS Control Popints				
S. No.	**Point ID.**	**EASTING (M)**	**NORTHING (M)**	**MSL (M)**
44	GCP17A	657559.3556	3000665.308	1734.16
45	GCP18	660712.527	3005538.055	1263.73
46	GCP18A	660692.0952	3005530.965	1265.92
47	GCP20	660997.3728	3006356.107	981.38
48	GCP20A	660995.9098	3006330.214	978.16
49	GCP21	662014.4137	3005851.09	590.2
50	GCP21A	662036.1539	3005855.135	588.22
51	GCP22	661834.9029	3007728.35	844.6
52	GCP22A	661831.8355	3007742.507	844.51
53	GCP19	661037.8503	3008807.005	623.16
54	GCP19A	661035.2002	3008820.614	623.34
55	GCP23	659382.523	3010054.928	682.14
56	GCP23A	659340.8565	3009967.448	677.14
57	GCP24	659006.9986	3010375.251	881.67
58	GCP24A	658991.955	3010368.258	882.56
59	GCP25	658383.1025	3011802.161	1104.76
60	GCP25A	658388.9359	3011775.064	1106.68
61	GCP26	657777.6818	3013329.341	1295.22
62	GCP26A	657764.7536	3013290.116	1293.42
63	GCP27	658250.9405	3014926.729	1215.97
64	GCP27A	658202.8136	3014927.714	1218.16
65	GCP28	657975.0261	3018063.031	806.51
66	GCP28A	657972.5755	3018076.479	807.83

Annexure - C: List of Major Crossings

S. No.	Crossing Code	Crossing Type	Location of Occurance	Chianage (M)	Crossing Width (M)	Alignment Sheet No.
1	SILIGURI-CRS-RAIL-01	Railway	TP3 to TP4	1424.81		ALN-01
2	SILIGURI-CRS-CANAL-01	Canal	TP32 to TP33	5790.65	12.00	ALN-4
3	SILIGURI-CRS-RIV-01	River	TP33 to TP34	6677.62	98.05	ALN-4
4	SILIGURI-CRS-CANAL-02	Canal	TP34 to TP35	7069.37	9.74	ALN-5
5	SILIGURI-CRS-RIV-02	Teesta River	TP77 to TP78	16302.62	2502.43	ALN-10
6	SILIGURI-CRS-RIV-03	Khulmai River	TP78 to TP79	19683.38	15.41	ALN-12
7	SILIGURI-CRS-RIV-04	River	TP82 to TP83	23130.78	26.53	ALN-14
8	SILIGURI-CRS-DRN-01	Drain	TP83 to TP84	23309.87	29.95	ALN-14
9	SILIGURI-CRS-CANAL-03	Canal	TP88 to TP89	24205.39	31.84	ALN-15
10	SILIGURI-CRS-RIV-05	River	TP104 to TP105	30267.09	410.66	ALN-18
11	SILIGURI-CRS-DRN-02	Drain	TP107 to TP108	37682.53	28.78	ALN-23
12	SILIGURI-CRS-DRN-03	Drain	TP116 to TP117	41707.31	2.36	ALN-25
13	SILIGURI-CRS-DRN-04	Drain	TP117 to TP118	41897.10	3.61	ALN-25
14	SILIGURI-CRS-RAIL-02	Railway	TP118 to TP119	41956.18		ALN-25
15	SILIGURI-CRS-DRN-05	Drain	TP120 to TP121	42229.08	2.68	ALN-25
16	SILIGURI-CRS-DRN-06	Drain	TP120 to TP121	42269.02	4.16	ALN-25
17	SILIGURI-CRS-NH-01	NH-31	TP134 to TP135	44885.27	9.57	ALN-27
18	SILIGURI-CRS-RIV-06	River Chel	TP139 to TP140	45519.38	112.81	ALN-27
19	SILIGURI-CRS-RIV-07	Ghish River	TP159 to TP160	48392.57	141.87	ALN-29
20	SILIGURI-CRS-RIV-08	Ghish River	TP162 to TP163	48814.37	93.67	ALN-29
21	SILIGURI-CRS-NH-02	NH-31	TP164 to TP165	49018.91	8.23	ALN-29
22	SILIGURI-CRS-RAIL-03	Railway	TP170 to TP171	49544.96		ALN-30
23	SILIGURI-CRS-DRN-07	Drain	TP183 to TP184	50879.32	19.32	ALN-30
24	SILIGURI-CRS-RIV-09	River	TP203 to TP204	53073.95	26.92	ALN-32
25	SILIGURI-CRS-NH-03	NH-717A	TP263 to TP264	55734.03	12.86	ALN-33
26	SILIGURI-CRS-NH-04	NH-717A	TP1012 to TP1013	80264.86	3.65	ALN-48
27	SILIGURI-CRS-NH-05	NH-717A	TP1021 to TP1022	81093.88	2.67	ALN-48
28	SILIGURI-CRS-NH-06	NH-717A	TP1027 to TP1028	81308.41	3.73	ALN-48
29	SILIGURI-CRS-NH-07	NH-717A	TP1032 to TP1033	81631.72	4.59	ALN-49
30	SILIGURI-CRS-NH-08	NH-717A	TP1038 to TP1039	81908.13	7.04	ALN-49
31	SILIGURI-CRS-NH-09	NH-717A	TP1043 to TP1044	82465.83	3.06	ALN-49
32	SILIGURI-CRS-NH-10	NH-717A	TP1054 to TP1055	82885.06	7.40	ALN-49
33	SILIGURI-CRS-NH-11	NH-717A	TP1065 to TP1066	83974.03	9.16	ALN-50

Annexure - C: List of Major Crossings

S. No.	Crossing Code	Crossing Type	Location of Occurance	Chianage (M)	Crossing Width (M)	Alignment Sheet No.
34	SILIGURI-CRS-NH-11A	NH-717A	TP1090 to TP1091	85704.96	8.23	ALN-51
35	SILIGURI-CRS-NH-12	NH-717A	TP1097 to TP1098	86913.11	4.77	ALN-51
36	SILIGURI-CRS-NH-13	NH-717A	TP1114 to TP1115	87812.11	3.51	ALN-52
37	SILIGURI-CRS-NH-14	NH-717A	TP1130 to TP1131	88646.12	3.83	ALN-53
38	SILIGURI-CRS-NH-15	NH-717A	TP1130 to TP1131	88662.33	4.09	ALN-53
39	SILIGURI-CRS-NH-16	NH-717A	TP1152 to TP1153	89278.64	4.71	ALN-53
40	SILIGURI-CRS-NH-17	NH-717A	TP1325 to TP1326	95255.48	4.78	ALN-57
41	SILIGURI-CRS-NH-18	NH-717A	TP1339 to TP1340	95879.10	6.23	ALN-57
42	SILIGURI-CRS-NH-19	NH-717A	TP1374 to TP1375	97875.80	10.43	ALN-58
43	SILIGURI-CRS-NH-20	NH-717A	TP1377 to TP1378	97949.01	5.53	ALN-58
44	SILIGURI-CRS-NH-20A	NH-717A	TP1386 to TP1387	98260.75	4.47	ALN-58
45	SILIGURI-CRS-NH-21	NH-717A	TP1394 to TP1395	98432.88	3.74	ALN-58
46	SILIGURI-CRS-NH-22	NH-717A	TP1399 to TP1400	98585.38	3.47	ALN-58
47	SILIGURI-CRS-NH-22A	NH-717A	TP1403 to TP1404	98717.20	6.14	ALN-59
48	SILIGURI-CRS-NH-23	NH-717A	TP1409 to TP1410	98962.51	8.02	ALN-59
49	SILIGURI-CRS-NH-24	NH-717A	TP1414 to TP1415	99104.64	13.56	ALN-59
50	SILIGURI-CRS-NH-25	NH-717A	TP1429 to TP1430	99900.55	2.05	ALN-59
51	SILIGURI-CRS-NH-26	NH-717A	TP1435 to TP1436	100159.64	4.15	ALN-59
52	SILIGURI-CRS-NH-27	NH-717A	TP1561 to TP1562	105650.03	4.73	ALN-63
53	SILIGURI-CRS-NH-28	NH-717A	TP1567 to TP1568	105832.80	3.97	ALN-63
54	SILIGURI-CRS-NH-29	NH-717A	TP1606 to TP1607	107595.19	8.39	ALN-64
55	SILIGURI-CRS-NH-30	NH-717A	TP1669 to TP1670	110111.08	6.89	ALN-65
56	SILIGURI-CRS-NH-31	NH-717A	TP1678 to TP1679	110406.35	6.56	ALN-65
57	SILIGURI-CRS-NH-32	NH-717A	TP1725 to TP1726	112155.89	6.86	ALN-66
58	SILIGURI-CRS-NH-33	NH-717A	TP1729 to TP1730	112351.43	6.60	ALN-67
59	SILIGURI-CRS-NH-34	NH-717A	TP1736 to TP1737	112565.46	5.33	ALN-67
60	SILIGURI-CRS-NH-35	NH-717A	TP1747 to TP1748	112854.83	4.57	ALN-67
61	SILIGURI-CRS-NH-36	NH-717A	TP1972 to TP1973	119828.70	6.36	ALN-71
62	SILIGURI-CRS-NH-37	NH-717A	TP2087 to TP2088	124327.53	3.89	ALN-74
63	SILIGURI-CRS-NH-38	NH-717A	TP2092 to TP2093	124445.71	3.55	ALN-74
64	SILIGURI-CRS-NH-39	NH-717A	TP2180 to TP2181	127952.38	3.27	ALN-76
65	SILIGURI-CRS-NH-40	NH-717A	TP2191 to TP2192	128318.20	2.18	ALN-76
66	SILIGURI-CRS-NH-41	NH-717A	TP2207 to TP2208	128981.19	2.11	ALN-76
67	SILIGURI-CRS-NH-42	NH-717A	TP2220 to TP2221	129452.51	3.60	ALN-77
68	SILIGURI-CRS-NH-43	NH-717A	TP2243 to TP2244	130540.37	3.10	ALN-77
69	SILIGURI-CRS-NH-44	NH-717A	TP2253 to TP2254	130862.39	2.97	ALN-77
70	SILIGURI-CRS-NH-45	NH-717A	TP2256 to TP2257	130968.98	3.17	ALN-78
71	SILIGURI-CRS-NH-46	NH-717A	TP2266 to TP2267	131297.00	2.43	ALN-78
72	SILIGURI-CRS-NH-47	NH-717A	TP2287 to TP2288	131801.16	4.20	ALN-78
73	SILIGURI-CRS-NH-47A	NH-717A	TP2299 to TP2300	132048.58	3.17	ALN-78
74	SILIGURI-CRS-NH-48	NH-717A	TP2310 to TP2311	132322.87	4.79	ALN-78
75	SILIGURI-CRS-NH-49	NH-717A	TP2318 to TP2319	132532.96	4.05	ALN-78
76	SILIGURI-CRS-NH-50	NH-717A	TP2322 to TP2323	132677.69	10.36	ALN-79
77	SILIGURI-CRS-NH-51	NH-717A	TP2335 to TP2336	133101.52	2.87	ALN-79

Annexure - C: List of Major Crossings

S. No.	Crossing Code	Crossing Type	Location of Occurance	Chianage (M)	Crossing Width (M)	Alignment Sheet No.
78	SILIGURI-CRS-NH-52	NH-717A	TP2348 to TP2349	133626.29	3.89	ALN-79
79	SILIGURI-CRS-NH-53	NH-717A	TP2355 to TP2356	133876.96	5.94	ALN-79
80	SILIGURI-CRS-NH-54	NH-717A	TP2394 to TP2395	135626.93	13.81	ALN-80
81	SILIGURI-CRS-NH-55	NH-717A	TP2410 to TP2411	136338.26	6.32	ALN-81
82	SILIGURI-CRS-NH-56	NH-717A	TP2422 to TP2423	136795.06	11.51	ALN-81
83	SILIGURI-CRS-NH-57	NH-717A	TP2497 to TP2498	139562.75	3.80	ALN-83
84	SILIGURI-CRS-NH-58	NH-717A	TP2501 to TP2502	139646.65	4.01	ALN-83
85	SILIGURI-CRS-NH-59	NH-717A	TP2506 to TP2507	139721.96	3.88	ALN-83
86	SILIGURI-CRS-NH-60	NH-717A	TP2532 to TP2533	140991.77	7.25	ALN-83
87	SILIGURI-CRS-NH-61	NH-717A	TP2538 to TP2539	141182.07	3.86	ALN-84
88	SILIGURI-CRS-RIV-10	Rishi Khola River	TP2559 to TP2560	141990.67	36.93	ALN-84
89	SILIGURI-CRS-NH-62	NH-717A	TP2561 to TP2562	142034.04	5.82	ALN-84
90	SILIGURI-CRS-NH-63	NH-717A	TP2607 to TP2608	143985.36	5.15	ALN-85
91	SILIGURI-CRS-NH-64	NH-717A	TP2644 to TP2645	145550.73	6.36	ALN-86
92	SILIGURI-CRS-NH-65	NH-717A	TP2716 to TP2717	148687.19	11.43	ALN-88
93	SILIGURI-CRS-NH-66	NH-717A	TP2724 to TP2725	148937.84	11.51	ALN-88
94	SILIGURI-CRS-NH-67	NH-717A	TP2745 to TP2746	149592.83	8.51	ALN-88
95	SILIGURI-CRS-NH-68	NH-717A	TP2762 to TP2763	150119.34	11.89	ALN-89
96	SILIGURI-CRS-NH-69	NH-717A	TP2781 to TP2782	150825.39	4.27	ALN-89
97	SILIGURI-CRS-NH-70	NH-717A	TP2803 to TP2804	151620.17	10.30	ALN-90
98	SILIGURI-CRS-NH-71	NH-717A	TP2824 to TP2825	152228.50	7.11	ALN-90
99	SILIGURI-CRS-NH-72	NH-717A	TP2839 to TP2840	152770.60	7.53	ALN-90
100	SILIGURI-CRS-NH-73	NH-717A	TP2849 to TP2850	153052.78	9.46	ALN-91
101	SILIGURI-CRS-RIV-11	Rangpo Chu River	TP2885 to TP2886	154889.67	68.12	ALN-92
102	SILIGURI-CRS-NH-74	NH-717A	TP2885 to TP2886	154990.69	12.98	ALN-92
103	SILIGURI-CRS-NH-75	NH-717A	TP2905 to TP2906	155431.42	5.48	ALN-92
104	SILIGURI-CRS-NH-76	NH-717A	TP2919 to TP2920	155856.54	7.66	ALN-92
105	SILIGURI-CRS-NH-77	NH-717A	TP2930 to TP2931	156264.76	4.78	ALN-92
106	SILIGURI-CRS-NH-78	NH-717A	TP2947 to TP2948	156819.86	9.72	ALN-93
107	SILIGURI-CRS-NH-79	NH-717A	TP2979 to TP2980	158034.61	8.38	ALN-93
108	SILIGURI-CRS-NH-80	NH-717A	TP3003 to TP3004	158891.31	9.40	ALN-95
109	SILIGURI-CRS-NH-81	NH-717A	TP3045 to TP3046	160504.51	9.60	ALN-95
110	SILIGURI-CRS-NH-82	NH-717A	TP3058 to TP3059	160849.04	8.72	ALN-95
111	SILIGURI-CRS-NH-83	NH-717A	TP3062 to TP3063	160957.09	9.80	ALN-95
112	SILIGURI-CRS-NH-84	NH-717A	TP3068 to TP3069	161150.15	11.50	ALN-95
113	SILIGURI-CRS-NH-85	NH-717A	TP3074 to TP3075	161328.17	10.21	ALN-95

Annexure - C: List of Major Crossings

S. No.	Crossing Code	Crossing Type	Location of Occurance	Chianage (M)	Crossing Width (M)	Alignment Sheet No.
114	SILIGURI-CRS-NH-86	NH-717A	TP3101 to TP3102	162387.49	14.48	ALN-97
115	SILIGURI-CRS-NH-87	NH-717A	TP3125 to TP3126	163384.78	8.16	ALN-97
116	SILIGURI-CRS-NH-88	NH-717A	TP3150 to TP3151	164502.23	9.53	ALN-97
117	SILIGURI-CRS-NH-89	NH-717A	TP3195 to TP3196	166245.87	7.71	ALN-98
118	SILIGURI-CRS-NH-90	NH-717A	TP3198 to TP3199	166328.20	9.13	ALN-98
119	SILIGURI-CRS-NH-91	NH-717A	TP3204 to TP3205	166514.45	7.39	ALN-98
120	SILIGURI-CRS-NH-92	NH-717A	TP3208 to TP3209	166692.77	10.84	ALN-99
121	SILIGURI-CRS-NH-93	NH-717A	TP3221 to TP3222	167310.12	14.91	ALN-99
122	SILIGURI-CRS-NH-94	NH-717A	TP3233 to TP3234	167768.09	6.42	ALN-99
123	SILIGURI-CRS-NH-95	NH-717A	TP3287 to TP3288	170031.87	11.51	ALN-101
124	SILIGURI-CRS-NH-96	NH-717A	TP3313 to TP3314	170975.10	10.73	ALN-101
125	SILIGURI-CRS-NH-97	NH-717A	TP3344 to TP3345	172419.82	9.54	ALN-102
126	SILIGURI-CRS-NH-98	NH-717A	TP3350 to TP3351	172597.70	6.65	ALN-102
127	SILIGURI-CRS-NH-99	NH-717A	TP3374 to TP3375	173593.25	4.27	ALN-103
128	SILIGURI-CRS-NH-100	NH-717A	TP3415 to TP3416	175121.11	2.72	ALN-104
129	SILIGURI-CRS-NH-101	NH-717A	TP3466 to TP3466A	177074.47	5.31	ALN-105
130	SILIGURI-CRS-NH-102	NH-717A	TP3503 to TP3504	178699.76	2.10	ALN-106
131	SILIGURI-CRS-NH-103	NH-717A	TP3513 to TP3514	178995.02	2.68	ALN-106
132	SILIGURI-CRS-NH-104	NH-717A	TP3536 to TP3537	179989.74	14.11	ALN-106
133	SILIGURI-CRS-NH-105	NH-717A	TP3546 to TP3547	180395.74	5.57	ALN-107
134	SILIGURI-CRS-NH-106	NH-717A	TP3551 to TP3552	180672.40	7.44	ALN-107
135	SILIGURI-CRS-NH-107	NH-717A	TP3555 to TP3556	180751.60	3.17	ALN-107
136	SILIGURI-CRS-NH-108	NH-717A	TP3559 to TP3560	180850.32	4.05	ALN-107
137	SILIGURI-CRS-NH-109	NH-717A	TP3562 to TP3563	180918.58	4.39	ALN-107
138	SILIGURI-CRS-NH-110	NH-717A	TP3565 to TP3566	180988.78	5.53	ALN-107
139	SILIGURI-CRS-NH-111	NH-717A	TP3568 to TP3569	181047.12	7.81	ALN-107
140	SILIGURI-CRS-NH-112	NH-717A	TP3591 to TP3592	181823.75	4.61	ALN-107
141	SILIGURI-CRS-NH-113	NH-717A	TP3595 to TP3596	181924.58	3.38	ALN-108
142	SILIGURI-CRS-NH-114	NH-717A	TP3654 to TP3655	184140.15	3.99	ALN-109
143	SILIGURI-CRS-NH-115	NH-717A	TP3662 to TP3663	184436.17	4.30	ALN-109

Annexure - D: List of Other Minor Crossings

S.No.	Crossing Type	Location of Occurance	Chiange(m)	Crossing Width(m)
1	Minor Road	TP2-TP3	133.115	6.661
2	Minor Road	TP2-TP3	990.422	4.187
3	Minor Road	TP4-TP5	1737.180	4.074
4	Minor Road	TP4-TP5	2151.239	6.520
5	Minor Road	TP10-TP11	3111.383	13.301
6	Minor Drain	TP13-TP14	3545.466	
7	Minor Road	TP21-TP22	3661.918	1.160
8	Minor Road	TP26-TP27	3954.529	7.798
9	Minor Road	TP27-TP28	4088.171	5.671
10	Minor Road	TP29-TP30	4637.990	5.337
11	Minor Road	TP30-TP31	5038.972	5.930
12	Minor Road	TP31-TP32	5303.792	4.156
13	Minor Drain	TP32-TP33	6067.226	3.151
14	Minor Drain	TP32-TP33	6081.316	14.090
15	Minor Drain	TP32-TP33	6311.730	13.318
16	Minor Road	TP33-TP34	6793.496	12.029
17	Minor Road	TP33-TP34	6846.632	3.157
18	Minor Road	TP34-TP35	7024.801	4.043
19	Minor Road	TP34-TP35	7661.230	6.417
20	Minor Road	TP35-TP36	8132.628	5.774
21	Minor Drain	TP35-TP36	8293.340	
22	Minor Drain	TP35-TP36	8432.081	
23	Minor Road	TP36-TP37	8534.817	3.596
24	BT Road	TP36-TP37	8704.332	3.727
25	Minor Road	TP37-TP38	8767.161	3.499
26	Minor Road	TP38-TP39	8935.549	2.000
27	Minor Road	TP39-TP40	9034.954	2.017
28	Minor Road	TP40-TP41	9101.700	2.006
29	Minor Road	TP40-TP41	9207.876	4.395
30	Minor Road	TP41-TP42	9336.064	3.272
31	Minor Road	TP41-TP42	9406.368	4.045
32	Minor Drain	TP47-TP48	9763.606	4.227
33	Minor Road	TP62-TP63	10293.380	4.058
34	Minor Road	TP70-TP71	10995.335	4.465
35	BT Road	TP72-TP73	11230.363	6.490
36	Minor Road	TP73-TP74	11427.329	3.490
37	Minor Drain	TP74-TP75	12259.652	5.330
38	Minor Drain	TP74-TP75	12665.079	35.054
39	Minor Drain	TP75-TP76	12886.652	15.486
40	Minor Drain	TP76A-TP77	13179.069	38.405
41	Minor Drain	TP77-TP78	13505.592	7.796
42	Minor Drain	TP77-TP78	13555.424	49.832
43	Minor Road	TP77-TP78	16318.313	2.828
44	Minor Road	TP77-TP78	16385.898	3.054
45	Minor Road	TP78-TP79	16904.886	3.514

Annexure - D: List of Other Minor Crossings

S.No.	Crossing Type	Location of Occurance	Chiange(m)	Crossing Width(m)
46	Minor Road	TP78-TP79	17273.706	6.243
47	Minor Road	TP78-TP79	17553.447	4.484
48	Minor Drain	TP78-TP79	17886.196	4.209
49	Minor Road	TP78-TP79	18271.435	3.004
50	Minor Drain	TP78-TP79	18857.383	8.323
51	Minor Road	TP78-TP79	19268.447	4.214
52	Minor Road	TP78-TP79	19608.600	4.356
53	Minor Road	TP78-TP79	19696.281	3.315
54	Minor Road	TP78-TP79	20028.725	4.033
55	Minor Road	TP79-TP80	21108.067	5.741
56	Minor Road	TP79-TP80	21550.034	5.717
57	Minor Drain	TP79-TP80	21768.882	5.717
58	Minor Drain	TP79-TP80	22028.833	3.077
59	Minor Drain	TP79-TP80	22045.407	4.043
60	Minor Road	TP80-TP81	22399.586	4.310
61	Minor Drain	TP82-TP83	22964.313	5.473
62	Minor Drain	TP84-TP85	23481.985	89.307
63	Minor Road	TP87-TP88	23708.756	4.906
64	Minor Road	TP88-TP89	23934.222	6.311
65	Minor Road	TP88-TP89	24166.537	5.791
66	Minor Road	TP88-TP89	24499.806	8.362
67	Minor Road	TP90-TP91	24600.368	15.589
68	Minor Road	TP90-TP91	24663.659	8.979
69	Minor Road	TP90-TP91	24792.622	3.458
70	Minor Road	TP91-TP92	24994.987	7.000
71	Minor Road	TP91-TP92	25657.289	3.744
72	Minor Road	TP91-TP92	25717.221	2.243
73	Minor Road	TP91-TP92	26153.791	3.002
74	Minor Road	TP92-TP93	26964.025	3.030
75	Minor Road	TP93-TP94	27373.515	4.137
76	Minor Road	TP94-TP95	27562.484	7.018
77	Minor Road	TP94-TP95	27576.455	3.321
78	Minor Road	TP100-TP101	27954.640	2.001
79	Minor Road	TP100-TP101	28079.390	35.997
80	Minor Road	TP101-TP102	28641.289	6.470
81	Minor Road	TP101-TP102	28654.441	13.151
82	Minor Drain	TP101-TP102	28823.972	7.961
83	Minor Drain	TP101-TP102	28958.251	8.221
84	Minor Road	TP104-TP105	29764.796	3.177
85	Minor Drain	TP104-TP105	30377.695	7.053
86	Minor Road	TP105-TP106	31125.598	4.016
87	Minor Drain	TP105-TP106	31129.524	3.029
88	Minor Drain	TP105-TP106	31252.893	4.958
89	Minor Drain	TP105-TP106	31541.619	49.316
90	Minor Drain	TP105-TP106	31617.274	10.653

Annexure - D: List of Other Minor Crossings

S.No.	Crossing Type	Location of Occurance	Chiange(m)	Crossing Width(m)
91	Minor Drain	TP106-TP107	31809.663	23.376
92	Minor Drain	TP106-TP107	31995.259	3.234
93	Minor Road	TP106-TP107	32377.987	3.706
94	Minor Drain	TP106-TP107	32390.644	3.293
95	Minor Road	TP106-TP107	32611.091	3.015
96	Minor Road	TP106-TP107	32787.527	3.342
97	Minor Road	TP106-TP107	32811.255	3.420
98	Minor Road	TP106-TP107	32975.327	4.676
99	Minor Drain	TP106-TP107	33124.836	4.333
100	Minor Drain	TP106-TP107	33363.468	2.945
101	Minor Road	TP106-TP107	33880.562	6.992
102	Minor Drain	TP106-TP107	34128.628	5.350
103	Minor Drain	TP106-TP107	34359.145	7.011
104	Minor Drain	TP106-TP107	34474.048	4.796
105	Minor Drain	TP106-TP107	34564.107	4.411
106	Minor Drain	TP107-TP108	34708.392	5.184
107	Minor Drain	TP107-TP108	34977.612	5.342
108	Minor Drain	TP107-TP108	35072.906	17.838
109	Minor Drain	TP107-TP108	35102.378	29.472
110	Minor Drain	TP107-TP108	35550.740	25.586
111	Minor Drain	TP107-TP108	35681.184	21.048
112	Minor Drain	TP107-TP108	35771.597	4.523
113	Minor Drain	TP107-TP108	35942.023	77.418
114	Minor Road	TP107-TP108	36066.295	5.001
115	Minor Road	TP107-TP108	36351.954	16.003
116	Minor Road	TP107-TP108	36366.054	14.101
117	Minor Road	TP107-TP108	36626.480	4.006
118	Minor Road	TP107-TP108	36839.410	5.002
119	Minor Road	TP107-TP108	36970.672	5.275
120	Minor Road	TP107-TP108	37092.173	15.978
121	Minor Road	TP107-TP108	37264.361	5.018
122	Minor Drain	TP107-TP108	37329.444	10.110
123	Minor Road	TP107-TP108	37461.400	12.690
124	Minor Road	TP107-TP108	37824.784	10.638
125	Minor Road	TP107-TP108	38133.060	4.003
126	Minor Drain	TP107-TP108	38164.453	10.140
127	Minor Drain	TP107-TP108	38193.719	29.267
128	Minor Drain	TP107-TP108	38359.988	92.195
129	Minor Drain	TP108-TP109	38485.756	56.821
130	Minor Road	TP108-TP109	38514.371	5.898
131	Minor Road	TP108-TP109	38549.513	35.142
132	Minor Road	TP108-TP109	38557.155	7.642
133	Minor Road	TP108-TP109	38928.731	9.969
134	BT Road	TP109-TP110	39258.812	10.064
135	Minor Road	TP110-TP111	39448.996	14.616

Annexure - D: List of Other Minor Crossings

S.No.	Crossing Type	Location of Occurance	Chiange(m)	Crossing Width(m)
136	Minor Road	TP110-TP111	39512.232	63.235
137	Minor Road	TP110-TP111	39516.828	4.597
138	Minor Drain	TP110-TP111	39768.129	16.486
139	Minor Road	TP111-TP112	40003.107	4.130
140	Minor Road	TP112-TP113	40470.229	5.271
141	Minor Road	TP113-TP114	40764.391	6.120
142	Minor Road	TP114-TP115	40938.060	5.110
143	Minor Road	TP114-TP115	40988.825	7.017
144	Minor Drain	TP114-TP115	41018.113	6.107
145	Minor Drain	TP114-TP115	41111.239	16.255
146	Minor Road	TP114-TP115	41269.032	4.996
147	Minor Drain	TP115-TP116	41332.946	43.512
148	Minor Road	TP115-TP116	41381.984	7.124
149	Minor Drain	TP115-TP116	41510.001	84.556
150	Minor Road	TP118-TP119	42004.753	4.125
151	BT Road	TP121-TP122	42494.092	8.102
152	BT Road	TP122-TP123	42739.054	7.021
153	Minor Drain	TP122-TP123	42845.867	12.071
154	Minor Drain	TP122-TP123	42891.233	31.784
155	Minor Drain	TP122-TP123	42917.854	9.970
156	Minor Drain	TP122-TP123	42993.829	9.785
157	Minor Drain	TP122-TP123	43023.112	12.086
158	Minor Drain	TP122-TP123	43182.005	4.000
159	Minor Drain	TP122-TP123	43456.240	7.852
160	Minor Road	TP122-TP123	43548.906	6.920
161	Minor Drain	TP122-TP123	43604.367	7.298
162	Minor Road	TP122-TP123	43640.719	4.444
163	Minor Road	TP122-TP123	43743.209	4.002
164	Minor Drain	TP122-TP123	43902.679	6.327
165	Minor Road	TP122-TP123	43948.670	4.010
166	Minor Road	TP124-TP125	44138.928	5.174
167	Minor Road	TP125-TP126	44272.009	5.219
168	Minor Road	TP125-TP126	44324.825	3.170
169	Minor Road	TP125-TP126	44389.176	3.205
170	Minor Road	TP126-TP127	44517.730	4.134
171	Minor Road	TP126-TP127	44654.200	11.087
172	Minor Road	TP141-TP142	46071.228	3.080
173	Minor Road	TP149-TP150	46543.917	9.389
174	Minor Road	TP154-TP155	46934.747	4.144
175	Minor Drain	TP154-TP155	46957.368	10.771
176	Minor Road	TP156-TP157	47505.462	4.149
177	Minor Road	TP156-TP157	47715.950	2.204
178	Minor Road	TP170-TP171	49564.347	4.032
179	Minor Road	TP180-TP181	50623.669	4.891
180	Minor Road	TP184-TP185	51169.519	6.271

Annexure - D: List of Other Minor Crossings

S.No.	Crossing Type	Location of Occurance	Chiange(m)	Crossing Width(m)
181	Minor Road	TP186-TP187	51467.865	5.251
182	Minor Road	TP192-TP193	52080.584	5.423
183	Minor Road	TP195-TP196	52411.888	7.771
184	Minor Road	TP554-TP555	63359.090	3.166
185	Minor Road	TP602-TP603	64980.411	4.350
186	Minor Road	TP616-TP617	65332.030	7.597
187	Minor Road	TP745-TP746	68797.955	3.575
188	Minor Road	TP768-TP769	69493.514	6.183
189	Minor Road	TP808-TP809	70697.141	5.210
190	Minor Road	TP862-TP863	73214.967	8.889
191	Minor Road	TP936-TP937	76316.326	4.012
192	Minor Road	TP2042-TP2043	122816.202	2.915
193	Minor Road	TP2057-TP2058	123295.627	2.001
194	Minor Road	TP2083-TP2084	124131.142	2.001
195	Minor Road	TP2117-TP2118	125548.187	3.920
196	Minor Road	TP2120-TP2121	125668.085	4.693
197	Minor Road	TP2140-TP2141	126382.014	6.320
198	BT Road	TP2168-TP2169	127516.196	7.688
199	Minor Road	TP2280-TP2281	131645.201	4.785
200	Minor Road	TP2342-TP2343	133321.449	2.175
201	Minor Road	TP2488-TP2489	139268.459	4.321
202	Minor Road	TP2673-TP2674	146937.968	5.049
203	Minor Road	TP2674-TP2675	147049.635	4.559
204	Minor Road	TP2675-TP2676	147092.632	9.770
205	Minor Road	TP2675-TP2676	147200.734	14.095
206	Minor Road	TP2693-TP2694	147866.638	4.221
207	Minor Road	TP3126-TP3127	163399.977	3.499
208	Minor Road	TP3246-TP3247	168302.634	7.372
209	Minor Road	TP3373-TP3374	173540.219	17.459
210	Minor Road	TP3375-TP3376	173693.729	25.574
211	Minor Road	TP3462-TP3463	176973.407	16.110
212	Minor Road	TP3676-TP3677	184966.869	6.816

Annexure - E: List of HT Lines Crossings

S. No.	Crossing Type	Location of Occurance	Chiange(m)	Crossing Width(m)
1	High Tension Tower Line	TP31-TP32	5187.419	
2	High Tension Tower Line	TP31-TP32	5213.748	

VOLUME IV OF IV

SOIL STRATIFICATION REPORT,
SOIL RESITIVITY REPORT,
SOIL CHEMICAL ANALYSIS REPORT FOR

SILIGURI PIPELINE SECTION

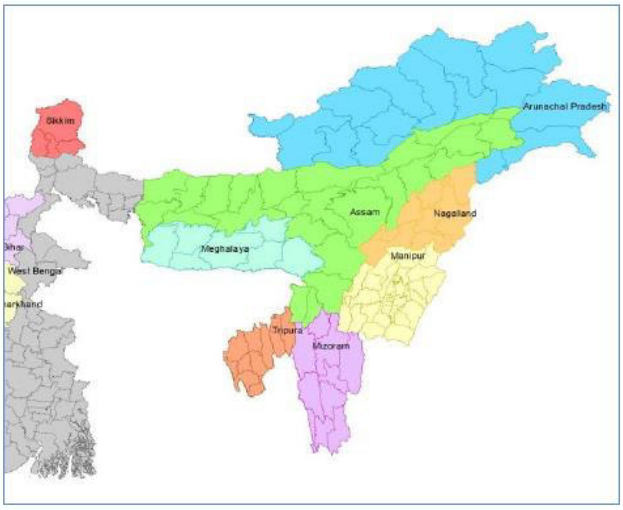
(APPLICABLE FOR ALL PART)

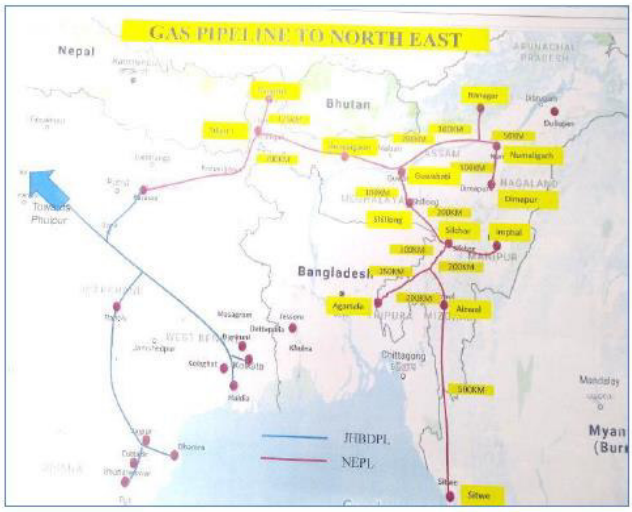
DETAILED ENGINEERING ROUTE SURVEY WORKS FOR PROPOSED NORTH EAST GAS GRID PIPELINE PROJECT – PACKAGE - III

GROUP – D

SILIGURI - GANGTOK NATURAL GAS PIPELINE (NEW LINE)

SOIL STRATIFICATION SURVEY – DRAFT REPORT





Submitted to

Engineer–in–Charge

INDRADHANUSH GAS GRID LIMITED (IGGL)

(A JV OF IOCL, ONGC, GAIL, OIL & NRL)

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SOIL STRATIFICATION REPORT

1.0.0 Introduction:

Indradhanush Gas Grid Limited, Guwahati has undertaken an activity to lay a pipeline between Siliguri to Gangtok and hence, undertaken to carry out the soil stratification survey along the route of the pipeline having a length of 188.528 kms.

Indradhanush Gas Grid Limited has entrusted the work of soil stratification survey on **Indian Resource Information and Management Technologies Ltd**. **(IN-RIMT)** Accordingly, the present report covers the study of soil stratification along the route alignment of Siliguri (Belakoba) to Gangtok (Ranipool).

Auger boring shall be conducted along the route and details of stratification shall be collected at the specified intervals.

The report on Soil Stratification survey along the pipeline route:
The detailed and exclusive report on Soil Stratification is presented as below.
Soil Investigation was extensively carried out for the main line and diverted pipeline route as per the specification and requirements.

2.0.0 Scope of Work

The scope of this survey work includes boring, visual classifications, collection of disturbed samples from bore holes and visual engineering classification of soil along the route and submission of detailed report.

2.1.0 Boreholes

Boreholes are made at an interval of every 250 m at the depth upto 3.0 m from the ground level. Wherever State Highway, National Highway, Canal, River, River bank etc. major crossings are encountered the bore holes are taken. Two bore holes have been taken at the either sides of the river banks.

Disturbed representative samples shall be collected from boreholes to classify the sub-soils visually at site.

2.2.0 Report

The report shall be prepared to include visual engineering classification of soils encountered along the pipeline route in bore log from.

The report contains the observation table as Annexure-I followed by the borehole logs for the same as Annexure-II.

3.0.0 Methodology

The methodology used for Soil Stratification survey is as below;

The 150 mm dia. post hole manual auger boring upto 3 m depth or till refusal of auger boring due to hard formation or till top of rock surface whichever is reached earlier and collection of disturbed samples in each bore.

Visual classification of soil/rock samples collected during boring and kept sealed in container with proper labeling and numbering. Report preparation is done to that effect after analysis of soil samples at the laboratory. pH of water encountered in the borehole shall be checked with the battery operated pH meter.

4.0.0 Borehole Logs

The logs of boreholes carried out along the entire ROW have been presented herewith. The legend used for identifying various types of sub soil is enclosed herewith.

5.0.0 Conclusion

The dominant sub soil profile along the pipeline route clay, sand, murrum followed by weathered rock is observed below ground level.

Trench excavation can be accomplished with conventional earth moving equipment.

ACKNOWLEDGEMENT:

We hereby extend our sincere thanks to all the officials of Indradhanush Gas Grid Limited, Guwahati for their kind and able guidance extended to us during the detail soil stratification survey and expect the same in future also.

Annexure-I
Soil Stratification Data

Annexure-II
Soil Stratification Borelogs

SOIL STRATIFICATION SURVEY FOR BELAKOBA TO RANIPOOL - ANNEXURE - I

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
1	1	00+005	657029	2941046	0.0-1.0	1.0-2.5	-	-	Start Village sample - Khalakerabari
2	2	00+249	657252	2941066	0.0-1.0	1.0-2.5	-	-	From Land
3	3	00+503	657302	2941315	0.0-1.0	1.0-2.5	-	-	From Land
4	4	00+758	657362	2941563	0.0-1.5	1.5-2.5	-	-	From Land
5	5	01+007	657411	2941807	0.0-2.5	-	-	-	Sample Collected
6	6	01+259	657443	2942057	0.0-2.5	-	-	-	From Land
7	7	01+484	657464	2942281	0.0-1.0	1.0-2.5	-	-	Railway Crossing Sample Collected
8	8	01+770	657494	2942565	0.0-1.4	1.4-2.5	-	-	
9	9	02+014	657518	2942808	0.0-2.5	-	-	-	Sample Collected
10	10	02+259	657562	2943049	0.0-2.5	-	-	-	From Land
11	11	02+504	657618	2943288	0.0-1.0	1.0-2.5	-	-	From Land
12	12	02+745	657662	2943525	0.0-2.5	-	-	-	From Land
13	13	03+063	657532	2943677	0.0-1.6	1.6-2.5	-	-	Sample Collected Road Side
14	14	03+251	657377	2943739	0.0-2.5	-	-	-	
15	15	03+381	657448	2943848	0.0-1.0 1.0-2.5	-	-	-	Nala Crossing Sample Collected
16	16	03+507	657514	2943955	0.0-2.5	-	-	-	From Land
17	17	03+760	657651	2944157	0.0-2.5	-	-	-	Open Land
18	18	04+001	657878	2944160	0.0-1.6	1.6-2.5	-	-	Sample Collected Road Side
19	19	04+224	658018	2944214	0.0-1.5	1.5-2.5	-	-	Canal Crossing Sample Collected
20	20	04+521	658246	2944400	0.0-2.5	-	-	-	From Land
21	21	04+760	658420	2944564	0.0-2.5	-	-	-	From Land

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
22	22	05+001	658620	2944696	0.0-2.5	-	-	-	Sample Collected
23	23	05+251	658783	2944884	0.0-2.5	-	-	-	From Land
24	24	05+647	659079	2945129	0.0-2.5	-	-	-	From Land
25	25	05+879	659245	2945291	0.0-2.5	-	-	-	From Land
26	26	06+133	659432	2945463	0.0-2.5	-	-	-	Tea, From Land Sample Collected
27	27	06+391	659631	2945625	0.0-2.5	-	-	-	Tea, From Land Sample Collected
28	28	06+646	659792	2945821	0.0-2.5	-	-	-	Tea, From Land Sample Collected
29	29	06+888	659999	2945929	0.0-0.8	0.8-2.5	-	-	River Crossing Sample Collected
30	30	07+012	660116	2945964	0.0-1.2	1.2-2.5	-	-	River Crossing Sample Collected
31	31	07+140	660226	2946030	0.0-2.5	-	-	-	Tea, From Land Sample Collected
32	32	07+375	660415	2946170	0.0-2.5	-	-	-	
33	33	07+626	660621	2946313	0.0-2.5	-	-	-	Tea, From Land Sample Collected
34	34	07+876	660826	2946456	0.0-2.5	-	-	-	Tea, From Land Sample Collected
35	35	08+127	660973	2946648	0.0-2.5	-	-	-	Sample Collected
36	36	08+375	661074	2946875	0.0-2.5	-	-	-	Tea, From Land Sample Collected
37	37	08+626	661194	2947086	0.0-2.5	-	-	-	Tea, From Land Sample Collected
38	38	08+875	661393	2947215	0.0-2.5	-	-	-	Tea, From Land Sample Collected
39	39	09+125	661399	2947465	0.0-2.5	-	-	-	Sample Collected Road Side
40	40	09+317	661415	2947656	0.0-2.5	-	-	-	Road Side
41	41	09+500	661433	2947838	0.0-2.5	-	-	-	Road Side, From Land
42	42	09+750	661455	2948087	0.0-2.5	-	-	-	Road Side From Land
43	43	10+000	661494	2948332	0.0-2.5	-	-	-	Sample Collected From Land

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
44	44	10+250	661520	2948576	0.0-2.5	-	-	-	Road Side
45	45	10+499	661574	2948798	0.0-2.5	-	-	-	Road Side
46	46	10+750	661768	2948762	0.0-2.5	-	-	-	Road Side
47	47	11+000	661982	2948632	0.0-2.5	-	-	-	Sample Collected
48	48	11+251	662194	2948498	0.0-2.5	-	-	-	Road Side
49	49	11+500	662377	2948475	0.0-2.5	-	-	-	Road Side
50	50	11+751	662547	2948638	0.0-2.5	-	-	-	From Land
51	51	11+999	662781	2948720	0.0-2.5	-	-	-	From Land
52	52	12+261	663028	2948807	0.0-1.4	1.4-2.5	-	-	From Land
53	53	12+507	663259	2948892	0.0-1.2	1.2-2.5	-	-	From Land
54	54	12+755	663492	2948976	0.0-1.0	1.0-2.5	-	-	Open Land
55	55	13+010	663732	2949063	-	0.0-2.5	-	-	Sample Collected
56	56	13+078	663796	2949084	-	0.0-2.5	-	-	River Crossing Sample Collected
57	57	13+126	663826	2949060	-	0.0-2.5	-	-	River Crossing Sample Collected
58	58	13+249	663882	2948950	-	0.0-2.5	-	-	From Land
59	59	13+513	664040	2948843	-	0.0-2.5	-	-	From Land
60	60	13+749	664237	2948973	-	0.0-2.5	-	-	From Land
61	61	14+005	664453	2949111	-	0.0-2.5	-	-	River Crossing Sample Collected
62	62	14+049	664490	2949134	-	0.0-2.5	-	-	River Crossing Sample Collected
63	63	14+203	664621	2949215	-	0.0-2.5	-	-	River Crossing
64	64	14+259	664669	2949245	-	0.0-2.5	-	-	Open Area Sample
65	65	14+379	664771	2949308	-	0.0-2.5	-	-	River Crossing Sample Collected

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
66	66	14+625	664975	2949445	-	0.0-2.5	-	-	River Area Dry
67	67	14+750	665080	2949513	-	0.0-2.5	-	-	River Crossing Sample Collected
68	68	15+009	665295	2949658	-	0.0-2.5	-	-	Sample Collected
69	69	15+124	665392	2949719	-	0.0-2.5	-	-	River Crossing
70	70	15+500	665711	2949918	-	0.0-2.5	-	-	River Area Dry Water Problem
71	71	15+589	665818	2949917	-	0.0-2.5	-	-	River Area Dry Water Problem
72	72	16+584	666653	2950457	-	0.0-2.5	-	-	River Area Dry Water Problem
73	73	16+749	666763	2950592	0.0-1.4	1.4-2.5	-	-	From Land
74	74	17+000	666826	2950829	0.0-2.5	-	-	-	Sample Collected From Land
75	75	17+250	666873	2951074	0.0-1.5	1.5-2.5	-	-	From Land
76	76	17+500	666917	2951320	0.0-1.6	1.6-2.5	-	-	From Land
77	77	17+754	666969	2951568	0.0-1.9	1.9-2.5	-	-	From Land
78	78	18+011	667010	2951822	0.0-2.0	2.0-2.5	-	-	Sample Collected
79	79	18+250	667046	2952058	0.0-2.1	2.1-2.5	-	-	From Land
80	80	18+500	667082	2952306	0.0-2.0	2.0-2.5	-	-	From Land
81	81	18+751	667118	2952554	0.0-2.2	2.2-2.5	-	-	From Land
82	82	19+000	667154	2952800	0.0-2.1	2.1-2.5	-	-	Sample Collected
83	83	19+251	667209	2953045	0.0-2.2	2.2-2.5	-	-	From Land
84	84	19+500	667246	2953288	0.0-2.1	2.1-2.5	-	-	From land
85	85	19+749	667259	2953526	0.0-2.2	2.2-2.5	-	-	From Land
86	86	19+943	667335	2953704	0.0-2.1	2.1-2.5	-	-	Sample Collected From Land
87	87	20+251	667406	2954004	0.0-1.8	1.8-2.5	-	-	Tea, From Land

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
88	88	20+501	667435	2954248	0.0-1.5	1.5-2.5	-	-	Tea, From Land
89	89	20+750	667375	2954490	0.0-1.6	1.6-2.5	-	-	Tea, From Land
90	90	21+000	667315	2954732	0.0-1.7	1.7-2.5	-	-	Sample Collected Tea, From Land
91	91	21+250	667258	2954976	0.0-2.0	2.0-2.5	-	-	Tea, From Land
92	92	21+501	667201	2955220	0.0-1.8	1.8-2.5	-	-	Tea, From Land
93	93	21+751	667148	2955464	0.0-1.9	1.9-2.5	-	-	Tea, From Land
94	94	22+001	667094	2955708	0.0-2.2	2.2-2.5	-	-	Sample Collected
95	95	22+252	667038	2955953	0.0-1.4	1.4-2.5	-	-	Tea, From Land
96	96	22+501	667017	2956201	0.0-1.2	1.2-2.5	-	-	Tea, From Land
97	97	22+751	666997	2956450	0.0-1.8	1.8-2.5	-	-	Tea, From Land
98	98	23+001	667051	2956672	0.0-2.0	2.0-2.5	-	-	Sample Collected Tea , From Land
99	99	23+251	667230	2956847	0.0-1.8	1.8-2.5	-	-	River Crossing Sample Collected
100	100	23+500	667337	2957053	0.0-2.1	2.1-2.5	-	-	River Crossing Sample Collected
101	101	23+751	667514	2957180	0.0-2.5	-	-	-	From Land
102	102	24+001	667696	2957342	0.0-1.8	1.8-2.5	-	-	Sample Collected
103	103	24+250	667750	2957585	0.0-2.5	-	-	-	Tea, From Land
104	104	24+500	667800	2957830	0.0-2.5	-	-	-	Tea, From Land
105	105	24+750	667855	2958073	0.0-2.5	-	-	-	Open Land
106	106	25+001	667917	2958317	0.0-2.5	-	-	-	Sample Collected From Land
107	107	25+251	667947	2958562	0.0-2.5	-	-	-	From Land
108	108	25+516	667958	2958827	0.0-2.5	-	-	-	From Land
109	109	25+750	667940	2959061	0.0-2.5	-	-	-	From Land

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
110	110	26+000	667936	2959311	0.0-1.8	1.8-2.5	-	-	Sample Collected Tea, From Land
111	111	26+250	667930	2959561	0.0-1.6	1.6-2.5	-	-	Tea, From Land
112	112	26+501	667927	2959812	0.0-1.5	1.5-2.5	-	-	Tea, From Land
113	113	26+751	668074	2960008	0.0-1.8	1.8-2.5	-	-	Tea, From Land
114	114	27+003	668236	2960201	0.0-2.0	2.0-2.5	-	-	Sample Collected Tea, From Land
115	115	27+251	668374	2960402	0.0-2.1	2.1-2.5	-	-	Tea, From Land
116	116	27+500	668425	2960646	0.0-2.0	2.0-2.5	-	-	Tea, From Land
117	117	27+751	668478	2960891	0.0-2.1	2.1-2.5	-	-	Open Land
118	118	28+002	668521	2961056	0.0-1.8	1.8-2.5	-	-	Sample Collected
119	119	28+250	668769	2961071	0.0-1.6	1.6-2.5	-	-	Tea, From Land
120	120	28+502	669003	2961126	0.0-2.0	2.0-2.5	-	-	Tea, From Land
121	121	28+752	669178	2961304	0.0-1.5	1.5-2.5	-	-	Tea, From Land
122	122	29+001	669353	2961481	0.0-2.0	2.0-2.5	-	-	Sample Collected Tea, From Land
123	123	29+251	669529	2961659	0.0-1.8	1.8-2.5	-	-	Tea, From Land
124	124	29+501	669673	2961831	0.0-2.0	2.0-2.5	-	-	Tea, From Land
125	125	29+753	669878	2961970	0.0-2.0	2.0-2.5	-	-	
126	126	30+001	670059	2962140	0.0-2.1	2.1-2.5	-	-	Sample Collected
127	127	30+251	670240	2962312	-	0.0-2.5	-	-	River Crossing Sample Collected
128	128	30+501	670424	2962482	-	0.0-2.5	-	-	River Crossing Sample Collected
129	129	30+750	670540	2962660	-	0.0-2.5	-	-	From Land
130	130	31+000	670407	2962872	-	0.0-2.5	-	-	Sample Collected Open Land
131	131	31+125	670274	2963083	-	0.0-2.5	-	-	Open Land

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
132	132	31+500	670140	2963294	-	0.0-2.5	-	-	Open Land
133	133	31+751	670006	2963506	-	0.0-2.5	-	-	Open Land
134	134	32+084	669805	2963771	0.0-0.8	0.8-2.5	-	-	Sample Collected Open Land
135	135	32+250	669699	2963898	0.0-2.0	2.0-2.5	-	-	From Land
136	136	32+499	669535	2964086	0.0-1.8	1.8-2.5	-	-	From Land
137	137	32+750	669372	2964277	0.0-2.1	2.1-2.5	-	-	From Land
138	138	32+999	669210	2964466	0.0-2.1	2.1-2.5	-	-	Sample Collected
139	139	33+249	669048	2964656	0.0-1.8	1.8-2.5	-	-	Sample Collected
140	140	33+500	668885	2964847	0.0-2.0	2.0-2.5	-	-	From Land
141	141	33+625	668719	2965034	0.0-1.9	1.9-2.5	-	-	From Land
142	142	34+000	668553	2965221	0.0-2.1	2.1-2.5	-	-	Sample Collected
143	143	34+250	668387	2965408	0.0-1.8	1.8-2.5	-	-	From Land
144	144	34+498	668227	2965598	0.0-2.1	2.1-2.5	-	-	Tea , From Land
145	145	34+750	668070	2965795	0.0-2.0	2.0-2.5	-	-	Tea , From Land
146	146	35+000	667914	2965990	0.0-1.7	1.7-2.5	-	-	Sample Collected
147	147	35+250	667756	2966184	0.0-2.0	2.0-2.5	-	-	Tea, From Land
148	148	35+501	667598	2966379	0.0-1.8	1.8-2.5	-	-	Tea , From Land
149	149	35+750	667443	2966574	0.0-2.0	2.0-2.5	-	-	From Land
150	150	36+000	667287	2966769	0.0-2.5	-	-	-	From Land Sample Collected
151	151	36+251	667128	2966963	0.0-2.5	-	-	-	Tea, From Land
152	152	36+502	666970	2967158	0.0-2.5	-	-	-	Tea, From Land
153	153	36+748	666817	2967351	0.0-2.1	2.1-2.5	-	-	Tea, From Land

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
154	154	37+002	666660	2967551	0.0-2.2	2.2-2.5	-	-	Sample Collected From Land
155	155	37+248	666521	2967753	0.0-2.1	2.1-2.5	-	-	Tea, From Land
156	156	37+500	666377	2967960	0.0-2.0	2.0-2.5	-	-	Tea, From Land
157	157	37+750	666234	2968165	0.0-1.9	1.9-2.5	-	-	Tea, From Land
158	158	38+001	666091	2968371	0.0-2.5	-	-	-	Sample Collected
159	159	38+250	665948	2968576	0.0-2.5	-	-	-	Tea, From Land
160	160	38+500	665805	2968781	0.0-1.9	1.9-2.5	-	-	Tea, From Land
161	161	38+750	665750	2969020	0.0-2.0	2.0-2.5	-	-	Tea, From Land
162	162	39+000	665718	2969268	0.0-2.1	2.1-2.5	-	-	Sample Collected Tea, From Land
163	163	39+250	665686	2969516	0.0-2.5	-	-	-	Sample Collected Tea, From Land
164	164	39+500	665639	2969761	0.0-2.1	2.1-2.5	-	-	Tea, From Land
165	165	39+750	665581	2970004	0.1-1.9	1.9-2.5	-	-	From Land
166	166	40+000	665524	2970248	0.0-2.0	2.0-2.5	-	-	Sample Collected
167	167	40+250	665467	2970491	0.0-2.0	2.0-2.5	-	-	From Land
168	168	40+500	665431	2970738	0.0-1.8	1.8 -2.5	-	-	From Land
169	169	40+750	665402	2970986	0.0-2.0	2.0-2.5	-	-	From Land
170	170	41+000	665357	2971230	0.0-1.8	1.8-2.5	-	-	Sample Collected
171	171	41+250	665250	2971456	0.0-2.0	2.0-2.5	-	-	Tea, From Land
172	172	41+501	665081	2971640	0.0-1.9	1.9-2.5	-	-	Tea, From Land
173	173	41+750	664959	2971854	0.0-2.0	2.0-2.5	-	-	Tea, From Land
174	174	42+004	664894	2972092	0.0-1.8	1.8-2.5	-	-	Sample Collected
175	175	42+250	664747	2972256	0.0-2.1	2.1-2.5	-	-	Tea, From Land

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
176	176	42+501	664821	2972475	0.0-1.9	1.9-2.5	-	-	Tea, From Land
177	177	42+745	664815	2972701	0.0-2.0	2.0-2.5	-	-	Road Side Tea, From Land
178	178	43+001	664587	2972771	0.0-2.1	2.1-2.5	-	-	Sample Collected
179	179	43+250	664370	2972832	0.0-2.0	2.0-2.5	-	-	Tea, From Land
180	180	43+501	664123	2972871	0.0-2.1	2.1-2.5	-	-	Tea, From Land
181	181	43+752	663879	2972927	0.0-1.9	1.9-2.5	-	-	Tea, From Land
182	182	43+923	663710	2972962	0.0-2.2	2.2-2.5	-	-	Sample Collected Tea, From Land
183	183	44+249	663392	2973036	0.0-2.1	2.1-2.5	-	-	Tea , From Land
184	184	44+500	663196	2973002	0.0-2.0	2.0-2.5	-	-	Road Side
185	185	44+751	663134	2972760	0.0-2.1	2.1-2.5	-	-	Road Side
186	186	45+000	663074	2972517	0.0-1.7	1.7-2.5	-	-	Sample Collected
187	187	45+249	662970	2972336	0.0-1.9	1.9-2.5	-	-	Road Side
188	188	45+498	662720	2972351	0.0-2.0	2.0-2.5	-	-	Road Side
189	189	45+734	662471	2972368	0.0-2.5	-	-	-	River Crossing Sample Collected
190	190	45+849	662372	2972379	0.0-1.9	-	-	-	River Area water problem
191	191	46+000	662221	2972386	0.0-1.6	1.6-2.5	-	-	River Crossing Sample Collected
192	192	46+250	661972	2972402	0.0-1.0	-	1.0-1.6	-	Road side
193	193	46+500	661723	2972423	0.0-1.0	-	1.0-1.5	-	rock problem
194	194	46+750	0	0	-	-	-	-	City Area cemented
195	195	47+000	0	0	-	-	-	-	City Area cemented
196	196	47+250	661066	2972775	0.0-0.8	-	0.8-1.6	-	Road side rock problem
197	197	47+500	660873	2972934	0.0-0.9	-	0.9-1.4	-	Road side rock problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
198	198	47+750	660685	2973099	0.0-0.7	-	0.7-1.7	-	Road side rock problem
199	199	48+001	660486	2973251	0.0-0.9	-	0.9-1.9	-	Sample collected rock problem
200	200	48+250	660282	2973394	0.0-1.0	-	1.0-2.1	-	rock problem
201	201	48+500	660072	2973527	0.0-1.0	-	1.0-2.5	-	River Crossing Sample Collected
202	202	48+724	659854	2973593	0.0-1.0	-	1.0-2.0	-	River Crossing Sample Collected
203	203	49+002	659593	2973668	0.0-1.0	-	1.0-2.0	-	River Crossing Sample Collected
204	204	49+250	659345	2973695	0.0-1.8	1.8-2.5	-	-	Raod side
205	205	49+502	659102	2973664	0.0-1.9	1.9-2.5	-	-	Raod side
206	206	49+749	658867	2973582	0.0-1.4	1.4-2.5	-	-	Sample collected
207	207	49+885	658769	2973484	0.0-1.0	1.0-2.50	-	-	Road Side, Normal Soil Bagrakote end
208	208	49+985	658728	2973580	0.0-1.0	1.0-2.50	-	-	Road Way Crossing
209	209	50+151	658657	2973714	0.0-1.0	1.0-2.50	-	-	Road Construction Side
210	210	50+407	658521	2973933	0.0-1.0	1.0-2.50	-	-	Road Side
211	211	50+641	658358	2974103	0.0-1.0	1.0-2.50	-	-	Road Side
212	212	50+911	658176	2974281	0.0-1.0	1.0-2.50	-	-	Sample Collected
213	213	51+160	657954	2974394	0.0-0.7	-	0.7-1.0	1.0-2.5	Road Side
214	214	51+266	657856	2974437	0.0-1.0	1.0-2.5	-	-	Nala Crossing
215	215	51+408	657729	2974498	0.0-1.0	1.0-2.5	-	-	Road Side
216	216	51+653	657507	2974603	0.0-1.0	1.0-2.5	-	-	Road Side
217	217	51+905	657278	2974708	0.0-1.0	1.0-2.5	-	-	Road Side Sample Collected
218	218	52+164	657043	2974817	0.0-0.60	-	0.6-1.0	1.0-2.5	Road Side
219	219	52+425	656836	2974955	0.0-0.7	-	0.7-1.0	1.0-2.5	Road Side

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
220	220	52+665	656671	2975130	0.0-0.6	-	0.6-1.0	1.0-2.5	Road Side
221	221	52+916	656512	2975325	0.0-0.90	0.9-1.0	-	1.0-2.5	Road Side Sample Collected
222	222	53+182	656341	2975521	0.0-1.0	-	1.0-2.5	-	Road Side
223	223	53+404	656139	2975660	0.0-1.0	1.0-2.5	-	-	River Crossing Sample Collected
224	224	53+546	656011	2975623	0.0-1.0	1.0-2.5	-	-	River Crossing Sample Collected
225	225	53+673	655891	2975650	0.0-1.0	1.0-1.9	1.9-2.5	-	Road Side
226	226	54+322	655735	2975809	0.0-1.0	-	1.0-2.5	-	Sample Collected Jungle Area
227	227	54+604	655796	2975889	0.0-0.5	-	0.5-1.0	1.0-2.0	Rock Problem
228	228	54+856	655817	2975950	0.0-0.6	-	0.6-1.0	1.0-2.1	Rock Problem
229	229	55+095	655580	2975945		-	0.0-0.7	0.7-1.9	Rock Problem
230	230	55+330	655388	2976042	0.0-0.5	-	0.5-0.7	0.7-1.80	Rock Problem Sample Collected
231	231	55+578	655282	2976079	0.0-0.6	-	0.6-1.0	1.0-1.7	Road Side , Rock Problem
232	232	55+842	655511	2976109	0.0-0.7	-	0.7-1.0	1.0-1.6	Rock Problem
233	233	56+118	655657	2976173	0.0-0.5	-	0.5-1.0	1.0-1.5	Rock Problem
234	234	56+362	655578	2976348	0.0-0.6	-	0.6-1.0	1.0-1.8	Sample Collecte Rock Problem
235	235	56+636	655523	2976183	0.0-0.6	-	0.6-0.8	0.8-1.5	Rock Problem Road Side
236	236	56+903	655431	2976315	0.0-0.5	-	0.5-0.9	0.9-1.7	Rock Problem
237	237	57+176	655471	2976319	0.0-0.6	-	0.6-1.0	1.0-1.6	Rock Problem
238	238	57+400	655446	2976512	0.0-0.7	-	0.7-1.0	1.0-1.5	Sample Collecte Rock Problem
239	239	57+661	655473	2976729	0.0-0.7	-	0.7-1.0	1.0-1.4	Rock Problem
240	240	57+913	655327	2976905	0.0-0.8	-	0.8-1.0	1.0-1.3	Rock Problem
241	241	58+159	655314	2977103	0.0-0.7	-	0.7-1.0	1.0-1.5	Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
242	242	58+432	655378	2977247	0.0-0.6	-	0.6-1.0	1.0-1.4	Sample Collected Rock Problem
243	243	58+671	655203	2977318	0.0-0.5	-	0.5-0.8	0.8-1.2	Rock Problem
244	244	58+925	655156	2977558	0.0-0.7	-	0.7-0.9	0.9-1.4	Rock Problem
245	245	59+179	655140	2977798	0.0-0.6	-	-	0.6-1.5	Rock Problem
246	246	59+446	655208	2977994	0.0-0.7	-	-	0.7-1.7	Sample Collected Rock Problem
247	247	59+799	655185	2978163	0.0-0.8	-	-	0.8-1.9	Rock Problem
248	248	60+044	655029	2978232	0.0-0.7	-	-	0.7-1.9	Rock Problem
249	249	60+328	655003	2978446	0.0-0.6	-	-	0.6-1.4	Rock Problem
250	250	60+502	654852	2978466	0.0-0.7	-	-	0.7-1.5	Sample Collecte Rock Problem
251	251	60+735	654733	2978649	0.0-0.6	-	0.6-1.0	1.0-1.5	Rock Problem
252	252	61+024	654735	2978892	0.0-0.5	-	-	0.5-1.6	Rock Problem
253	253	61+278	654767	2979122	0.0-0.7	-	-	0.7-1.8	Rock Problem
254	254	61+841	654927	2979261	0.0-0.8	-	-	0.8-1.7	Sample Collecte Rock Problem
255	255	62+091	654978	2979467	0.0-0.8	-	-	0.8-1.6	Rock Problem
256	256	62+353	654830	2979642	0.0-0.7	-	-	0.7-1.5	Rock Problem
257	257	62+608	654866	2979828	0.0-0.7	-	-	0.7-1.6	Rock Problem
258	258	62+868	654894	2979922	0.0-0.6	-	0.6-1.0	1.0-1.7	Sample Collecte Rock Problem
259	259	63+130	654863	2980087	0.0-0.6	-	0.6-1.0	1.0-1.6	Rock Problem
260	260	63+328	654749	2980208	0.0-0.7	-	0.7-1.0	1.0-1.7	Rock Problem
261	261	63+556	654561	2980253	0.0-0.6	-	0.6-1.0	1.0-1.6	Rock Problem
262	262	63+739	654375	2980377	0.0-0.5	-	0.5-0.8	0.8-1.5	Sample Collected Hill Area Problem
263	263	66+008	654325	2980333	0.0-0.6	-	0.6-0.9	0.9-1.4	Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
264	264	66+242	654187	2980426	0.0-0.7	-	-	0.7-1.5	Rock Problem
265	265	66+498	653991	2980589	0.0-0.8	-	-	0.8-1.6	Rock Problem
266	266	66+757	654059	2980735	0.0-0.7	-	-	0.7-1.7	Sample Collected Hill Area Problem
267	267	67+016	654078	2980784	0.0-0.6	-	-	0.6-1.5	Rock Problem
268	268	67+255	654308	2980815	0.0-0.5	-	0.5-1.0	1.0-1.4	Rock Problem
269	269	67+528	654271	2981014	0.0-0.6	-	0.6-1.0	1.0-1.6	Rock Problem
270	270	67+809	654353	2981132	0.0-0.7	-	0.7-1.0	1.0-1.6	Sample Collected Hill Area Problem
271	271	68+078	654322	2981160	0.0-0.6	-	-	0.6-1.5	Rock Problem
272	272	68+404	654166	2981087	0.0-0.7	-	-	0.7-1.4	Rock Problem
273	273	68+663	654160	2981303	0.0-0.6	-	-	0.6-1.3	Rock Problem
274	274	68+912	653981	2981444	0.0-0.7	-	-	0.7-1.4	Sample Collected Hill Area Problem
275	275	69+201	653795	2981522	0.0-0.6	-	-	0.6-1.5	Rock Problem
276	276	69+475	653605	2981576	0.0-0.5	-	-	0.5-1.5	Rock Problem
277	277	69+716	653653	2981758	0.0-0.7	-	-	0.7-1.4	Rock Problem
278	278	69+979	653673	2981688	0.0-0.6	-	0.6-1.0	1.0-1.5	Rock Problem
279	279	70+220	653836	2981836	0.0-0.7	-	-	0.7-1.6	Rock Problem
280	280	70+474	654037	2981880	0.0-0.8	-	-	0.8-1.5	Rock Problem
281	281	70+745	653918	2981741	0.0-0.6	-	0.6-1.0	1.0-1.4	Rock Problem
282	282	71+000	654094	2981603	0.0-0.7	-	-	0.7-1.5	Sample Collected Hill Area Problem
283	283	71+265	654226	2981570	0.0-0.6	-	-	0.6-1.4	Rock Problem
284	284	71+517	654347	2981765	0.0-0.6	-	-	0.6-1.4	Rock Problem
285	285	71+758	654510	2981885	0.0-0.7	-	-	0.7-1.5	Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
286	286	71+995	654581	2982093	0.0-0.6	-	-	0.6-1.6	Sample Collected Hill Area Problem
287	287	72+239	654698	2982234	0.0-1.0	-	-	1.0-1.8	Hill, Rock Problem
288	288	72+478	654832	2982406	0.0-1.0	-	-	1.0-1.9	Hill, Rock Problem
289	289	72+729	654830	2982626	0.0-0.8	-	0.8-1.0	1.0-1.7	Hill, Rock Problem
290	290	72+970	654902	2982847	0.0-1.0	-	-	1.0-1.6	Sample Collected Hill, Rock Problem
291	291	73+230	655004	2983025	0.0-0.8	-	0.8-1.0	1.0-1.5	Hill, Rock Problem
292	292	73+485	655041	2983262	0.0-1.0	-	0.1-1.2	1.2-1.4	Hill, Rock Problem
293	293	73+744	655118	2983378	0.0-0.7	-	-	0.7-1.3	Hill, Rock Problem
294	294	74+015	655013	2983347	0.0-0.6	-	0.6-1.0	1.0-1.5	Sample Collected Hill, Rock Problem
295	295	74+321	655150	2983525	0.0-0.7	-	0.7-1.0	1.0-1.4	Hill ,Rock Problem
296	296	74+582	655029	2983709	0.0-0.8	-	0.8-1.0	1.0-1.6	Hill, Rock Problem
297	297	74+838	655197	2983877	0.0-0.7	-		0.7-1.5	Hill ,Rock Problem
298	298	75+104	655397	2984020	0.0-1.0	-	1.0-1.2	1.2-1.6	Sample Collected Rock Problem
299	299	75+369	655627	2984086	0.0-0.8	-	0.8-1.0	1.0-1.7	Hill, Rock Problem
300	300	75+755	655852	2984016	0.0-1.0	-	1.0-1.3	1.3-1.7	Hill, Rock Problem
301	301	75+954	656086	2984033	0.0-0.8	-	-	0.8-1.6	Hill, Rock Problem
302	302	76+166	656282	2983948	0.0-0.8	-	0.8-1.0	1.0-1.7	Sample Collected Rock Problem
303	303	76+408	656570	2983903	0.0-0.7	-	-	0.7-1.5	Rock Problem
304	304	76+675	656398	2984036	0.0-0.8	-	-	0.8-1.6	Rock Problem
305	305	76+916	656314	2984255	0.0-0.6	-	0.6-1.0	1.0-1.5	Rock Problem
306	306	77+108	656148	2984243	0.0-0.7	-	0.7-1.0	1.0-1.6	Sample Collected Rock Problem
307	307	77+349	656019	2984339	0.0-0.8	-	0.8-1.0	1.0-1.5	Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
308	308	77+597	655806	2984390	0.0-0.7	-	0.0-0.7	0.7-1.6	Rock Problem
309	309	77+824	655710	2984401	0.0-0.8	-	0.8-1.0	1.0-1.7	Rock Problem
310	310	78+068	655885	2984308	0.0-0.8	-	0.8-1.0	1.0-1.6	Sample Collected
311	311	78+286	655751	2984286	0.0-0.8	-	-	0.8-1.4	Rock Problem
312	312	78+573	655565	2984436	0.0-1.0	-	1.0-1.2	1.2-1.5	Rock Problem
313	313	78+822	655482	2984648	0.0-0.8	-	0.8-1.0	1.0-1.6	Rock Problem
314	314	79+095	655502	2984881	0.0-0.7	-	0.7-1.0	1.0-1.5	Sample Collected Rock Problem
315	315	79+138	655515	2984923	0.0-1.0	-	1.0-1.2	1.2-1.4	New Diversion chainage starting
316	316	79+392	655601	2985115	0.0-0.8	-	0.8-1.3	1.3-1.5	Rock Problem
317	317	79+647	655566	2985364	0.0-0.7	-	0.7-1.2	1.2-1.3	Hill, Rock Problem
318	318	79+877	655490	2985574	0.0-0.9	-	0.9-1.1	1.1-1.5	Sample Collected Rock Problem
319	319	80+129	655275	2985666	0.0-0.9	-	0.9-1.2	1.2-1.4	Rock Problem
320	320	80+389	655356	2985694	0.0-0.8	-	0.8-1.1	1.1-1.5	Rock Problem
321	321	80+639	655581	2985642	0.0-0.7	-	0.7-1.0	1.0 -1.4	Rock Problem
322	322	80+897	655688	2985850	0.0-0.9	-	0.9-1.1	1.1-1.6	Sample Collected Rock Problem
323	323	81+136	655864	2985950	0.0-0.8	-	0.8-1.1	1.1-1.5	Rock Problem
324	324	81+388	655709	2985935	0.0-0.7	-	0.7-1.2	1.2-1.4	Rock Problem
325	325	81+651	655654	2985982	0.0-0.8	-	-	0.8-1.5	Rock Problem
326	326	81+891	655731	2986097	0.0-0.8	-	-	0.8-1.4	Sample Collected Rock Problem
327	327	82+142	655965	2986164	0.0-0.7	-	0.7-1.1	1.1-1.3	Rock Problem
328	328	82+385	656070	2986363	0.0-0.8	-	0.8-1.2	1.2-1.4	Rock Problem
329	329	82+642	656008	2986333	0.0-0.7	-	0.7-1.3	1.3-1.5	Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
330	330	82+896	655824	2986197	0.0-0.8	-	0.8-1.2	1.2-1.6	Sample Collected Rock Problem
331	331	83+136	655586	2986154	0.0-0.8	-	0.8-1.0	1.0-1.5	Rock Problem
332	332	83+388	655380	2986070	0.0-1.0	-	1.0-1.2	1.2-1.4	Rock Problem
333	333	83+651	655308	2986026	0.0-1.0	-	1.0-1.2	1.2-1.9	Rock Problem
334	334	83+828	655275	2986200	0.0-0.9	-	0.9-1.2	1.2-1.5	Sample Collected Rock Problem
335	335	84+128	655074	2986392	0.0-0.9	-	-	0.9-1.4	Rock Problem
336	336	84+426	654971	2986494	0.0-0.8	-	0.8-1.0	1.0-1.5	Rock Problem
337	337	84+634	654786	2986591	0.0-0.7	-	0.7-1.0	1.0-1.4	Rock Problem
338	338	84+907	654580	2986765	0.0-0.8	-	0.8-1.0	1.0-1.5	Sample Collected Rock Problem
339	339	85+126	654403	2986897	0.0-0.8	-	0.8-1.0	1.0-1.5	Rock Problem, Hill Area
340	340	85+384	654406	2987151	0.0-1.0	-	1.0-1.2	1.2-1.4	Rock Problem, Hill Area
341	341	85+641	654522	2987285	0.0-0.8	-	0.8-1.0	1.0-1.5	Rock Problem, Hill Area
342	342	85+885	654450	2987448	0.0-1.0	-	1.0-1.2	1.2-1.6	Sample Collected Rock Problem
343	343	86+134	654367	2987664	0.0-0.7	-	0.7-1.0	1.0-1.7	Rock Problem
344	344	86+394	654475	2987814	0.0-0.8	-	0.8-1.2	1.2-1.5	Rock Problem
345	345	86+643	654588	2988016	0.0-0.7	-	0.7-1.0	1.0-1.4	Rock Problem
346	346	86+892	654734	2988202	0.0-0.8	-	0.8-1.0	1.0-1.6	Sample Collected Rock Problem
347	347	87+131	654806	2988397	0.0-0.7	-	0.7-1.0	1.0-1.5	Rock Problem
348	348	87+385	654863	2988633	0.0-1.0	-	1.0-1.2	1.2-1.4	Rock Problem
349	349	87+643	654853	2988884	0.0-0.8	-	0.8 -1.0	1.0-1.6	Rock Problem
350	350	87+888	654976	2989089	0.0-0.7	-	0.7-1.0	1.0-1.5	Sample Collected Rock Problem
351	351	88+140	655124	2989278	0.0-0.8	-	0.8-1.0	1.0-1.4	Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
352	352	88+395	655263	2989481	0.0-0.7	-	0.7-1.0	1.0-1.5	Rock Problem
353	353	88+640	655409	2989634	0.0-0.7	-	0.7-0.9	0.9-1.5	Rock Problem
354	354	88+890	655638	2989686	0.0-1.0	-	1.0-1.2	1.2-1.6	Sample Collected Rock Problem
355	355	89+133	655796	2989872	0.0-0.8	-	0.8-1.0	1.0-1.5	Rock Problem
356	356	89+387	655982	2990047	0.0-0.8	-	0.8-1.0	1.0-1.4	Rock Problem
357	357	89+640	656167	2990203	0.0-1.0	-	1.0-1.2	1.2-1.5	Rock Problem, Hill Area
358	358	89+893	656399	2990131	0.0-1.0	-	-	1.0-1.8	Sample Collected Rock Problem
359	359	89+387	656611	2990047	0.0-0.8	-	0.8-1.0	1.0-1.6	Rock Problem
360	360	90+383	656748	2989863	0.0-1.0	-	1.0-1.2	1.2-1.7	Rock Problem
361	361	90+652	656727	2990058	0.0-1.0	-	1.0-1.2	1.2-1.6	Rock Problem
362	362	90+769	656560	2990162	0.0-1.0	-	1.0-1.4	1.4-1.7	Sample Collected Rock Problem
363	363	91+139	656456	2990320	0.0-0.8	-	0.8-1.0	1.0-1.5	Rock Problem
364	364	91+384	656279	2990480	0.0-0.7	-	0.7-0.9	0.9-1.4	Rock Problem
365	365	91+650	656305	2990624	0.0-0.8	-	0.8-1.0	1.0-1.5	Rock Problem
366	366	91+889	656310	2990850	0.0-0.7	-	0.7-1.0	1.0-1.6	Sample Collected Rock Problem
367	367	92+128	656367	2991086	0.0-1.0	-	1.0-1.2	1.2-1.5	Rock Problem, Hill Area
368	368	92+385	656428	2991316	0.0-0.9	-	0.9-1.2	1.2-1.6	Rock Problem, Hill Area
369	369	92+635	656550	2991526	0.0-0.8	-	0.8-1.0	1.0-1.5	Rock Problem, Hill Area
370	370	92+898	656713	2991691	0.0-1.0	-	1.0-1.2	1.2-1.6	Sample Collected Rock Problem
371	371	93+138	656813	2991910	0.0-1.0	-	-	1.0-1.5	Rock Problem
372	372	93+389	656822	2992150	0.0-1.0	-	-	1.0-1.6	Rock Problem
373	373	93+651	656993	2992337	0.0-1.0	-	1.0-1.2	1.2-1.6	Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
374	374	93+892	657113	2992530	0.0-1.0	-	1.0-1.2	1.2-1.7	Sample Collected Rock Problem
375	375	94+153	657195	2992752	0.0-0.9	-	0.9-1.1	1.1-1.8	Rock Problem
376	376	94+388	657288	2992968	0.0-0.8	-	0.8-1.0	1.0-1.8	Rock Problem
377	377	94+652	657283	2993172	0.0-1.0	-	1.0-1.2	1.2-1.8	Rock Problem
378	378	94+885	657156	2993208	0.0-1.0	-	1.0-1.3	1.3-1.8	Sample Collected Rock Problem
379	379	95+134	657031	2993270	0.0-0.9	-	0.9-1.2	1.2-1.7	Rock Problem
380	380	95+382	656897	2993336	0.0-1.0	-	1.0-1.1	1.1-1.6	Rock Problem
381	381	95+548	657065	2993346	0.0-0.8	-	0.8-1.3	1.3-1.7	Rock Problem
382	382	95+897	657024	2993645	0.0-0.9	-	0.9-1.2	1.2-1.7	Sample Collected Rock Problem
383	383	96+134	657186	2993813	0.0-1.0	-		1.0-1.5	Rock Problem
384	384	96+390	657408	2993876	0.0-1.0	-	1.0-1.2	1.2-1.6	Rock Problem
385	385	96+640	657620	2993996	0.0-1.0	-	1.0-1.3	1.3-1.7	Rock Problem, Hill Area
386	386	96+889	657421	2994021	0.0-1.0	-	1.0-1.2	1.2-1.8	Sample Collected Rock Problem
387	387	97+144	657184	2993928	0.0-1.0	-	1.0-1.2	1.2-1.7	Rock Problem
388	388	97+389	657244	2994030	0.0-0.8	-	0.8-1.1	1.1-1.7	Rock Problem
389	389	97+638	657445	2994162	0.0-0.9	-	0.9-1.2	1.2-1.6	Rock Problem
390	390	97+890	657668	2994273	0.0-0.9	-	0.9-1.1	1.1-1.7	Sample Collected Rock Problem
391	391	98+137	657910	2994320	0.0-0.9	-	0.9-1.2	1.2-1.6	Rock Problem
392	392	98+387	657930	2994454	0.0-1.0	-	1.0-1.3	1.3-1.6	Rock Problem
393	393	98+639	658061	2994611	0.0-1.0	-	1.0-1.2	1.2-1.7	Rock Problem
394	394	98+889	658212	2994798	0.0-0.9	-	0.9-1.2	1.2-1.8	Sample Collected Rock Problem
395	395	99+140	658376	2994966	0.0-1.0	-	1.0-1.2	1.2-1.7	Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
396	396	99+388	658513	2995156	0.0-1.0	-	1.0-1.1	1.1-1.6	Rock Problem
397	397	99+626	658429	2995170	0.0-0.9	-	0.9-1.0	1.0-1.7	Rock Problem
398	398	99+876	658602	2995328	0.0-0.8	-	0.8-1.1	1.1-1.8	Sample Collected Rock Problem
399	399	100+142	658564	2995346	0.0-0.9	-	0.9-1.2	1.2-1.7	Rock Problem
400	400	100+381	658517	2995372	0.0-1.0	-	1.0-1.3	1.3-1.9	Rock Problem
401	401	100+649	658670	2995496	0.0-0.9	-	0.9-1.2	1.2-1.7	Rock Problem
402	402	100+891	658712	2995570	0.0-1.0	-	1.0-1.2	1.2-1.8	Sample Collected Rock Problem
403	403	101+142	658953	2995636	0.0-1.0	-	1.0-1.3	1.3-1.7	Rock Problem
404	404	101+394	659153	2995696	0.0-0.9	-	0.9-1.2	1.2-1.8	Rock Problem
405	405	101+631	659320	2995591	0.0-1.0	-	1.0-1.1	1.1-1.7	Rock Problem
406	406	101+878	659156	2995783	0.0-1.0	-	1.0-1.2	1.2-1.9	Sample Collected Rock Problem
407	407	102+141	659357	2995665	0.0-0.9	-	0.9-1.1	1.1-1.8	Rock Problem
408	408	102+389	659589	2995668	0.0-0.8	-	0.8-1.0	1.0-1.9	Rock Problem
409	409	102+638	659805	2995580	0.0-0.9	-	0.9-1.1	1.1-1.8	Rock Problem
410	410	102+907	659971	2995373	0.0-1.0	-	1.0-1.2	1.2-1.9	Sample Collected Rock Problem
411	411	103+147	660179	2995320	0.0-0.9	-	0.9-1.2	1.2-1.8	Rock Problem
412	412	103+387	660344	2995175	0.0-1.0	-	1.0-1.2	1.2-1.7	Rock Problem
413	413	103+635	660542	2995058	0.0-0.9	-	0.9-1.2	1.2-1.8	Rock Problem
414	414	103+887	660679	2994889	0.0-1.0	-	1.0-1.3	1.3-1.9	Sample Collected Rock Problem
415	415	104+146	660779	2995014	0.0-0.9	-	0.9-1.2	1.2-2.0	Rock Problem
416	416	104+387	660942	2995059	0.0-1.0	-	1.0-1.2	1.2-1.9	Rock Problem
417	417	104+643	660843	2995202	0.0-0.9	-	0.9-1.2	1.2-2.0	Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
418	418	104+887	660897	2995427	0.0-1.0	-	1.0-1.2	1.2-2.0	Sample Collected Rock Problem
419	419	105+134	660987	2995631	0.0-0.9	-	0.9-1.4	1.4-2.0	Rock Problem
420	420	105+385	661034	2995850	0.0-1.0	-	1.0-1.5	1.5-2.1	Rock Problem
421	421	105+633	661233	2995946	0.0-1.0	-	1.0-1.6	1.6-2.0	Rock Problem
422	422	105+902	661424	2996120	0.0-0.9	-	0.9-1.5	1.5-1.9	Sample Collected Rock Problem
423	423	106+142	661643	2996163	0.0-1.0	-	1.0-1.6	1.6 -2.0	Rock Problem
424	424	106+389	661851	2996253	0.0-1.0	-	1.0-1.5	1.5-1.9	Rock Problem
425	425	106+640	662084	2996347	0.0-1.0	-	1.0-1.2	1.2-2.0	Rock Problem
426	426	106+890	662307	2996460	0.0-1.0	-	1.0-1.4	1.4-2.2	Sample Collected Rock Problem
427	427	107+143	662547	2996497	0.0-0.9	-	0.9-1.3	1.3-2.0	Rock Problem
428	428	107+384	662701	2996654	0.0-0.9	-	0.9-1.4	1.4-2.1	Rock Problem
429	429	107+636	662370	2996779	0.0-1.0	-	1.0-1.3	1.3-1.9	Rock Problem
430	430	107+909	663042	2996949	0.0-1.0	-	1.0-1.4	1.4-2.1	Sample Collected Rock Problem
431	431	108+132	663200	2997082	0.0-0.9	-	0.9-1.5	1.5-2.0	Rock Problem
432	432	108+390	663389	2997226	0.0-1.0	-	1.0-1.3	1.3-2.1	Rock Problem
433	433	108+652	663579	2997326	0.0-1.0	-	1.0-1.5	1.5-2.2	Rock Problem
434	434	108+884	663787	2997352	0.0-1.0	-	1.0-1.6	1.6-2.2	Sample Collected Rock Problem
435	435	109+142	663914	2997254	0.0-1.0	-	1.0-1.5	1.5 -1.9	Rock Problem
436	436	109+376	664000	2997205	0.0-0.9	-	0.9-1.4	1.4-2.0	Rock Problem
437	437	109+642	663918	2997438	0.0-1.0	-	1.0-1.5	1.5-2.0	Rock Problem
438	438	109+885	663707	2997478	0.0-1.0	-	1.0-1.6	1.6-2.3	Sample Collected Rock Problem
439	439	110+144	663613	2997624	0.0-0.9	-	0.9-1.5	1.5-2.1	Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
440	440	110+384	663491	2997761	0.0-1.0	-	1.0-1.4	1.4-2.0	Rock Problem
441	441	110+635	663294	2997870	0.0-1.0	-	1.0-1.4	1.4-2.2	Rock Problem
442	442	110+884	663212	2998033	0.0-1.0	-	1.0-1.4	1.4-2.3	Sample Collected Rock Problem
443	443	111+156	663085	2998212	0.0-1.0	-	1.0-1.4	1.4-2.0	Rock Problem
444	444	111+393	662966	2998353	0.0-1.0	-	1.0-1.5	1.5-2.2	Rock Problem
445	445	111+632	662772	2998306	0.0-1.0	-	1.0-1.6	1.6-2.3	Rock Problem
446	446	111+891	662557	2998211	0.0-1.0	-	1.0-1.5	1.5-2.1	Sample Collected Rock Problem
447	447	112+143	662628	2998189	0.0-1.0	-	1.0-1.4	1.4-2.0	Rock Problem
448	448	112+387	662432	2998146	0.0-0.9	-	0.9-1.5	1.5-2.1	Rock Problem
449	449	112+634	662459	2998352	0.0-1.0	-	1.0-1.4	1.4-2.2	Rock Problem
450	450	112+886	662559	2998560	0.0-1.0	-	1.0-1.5	1.5-2.1	Sample Collected Rock Problem
451	451	113+129	662705	2998750	0.0-1.0	-	1.0-1.5	1.5-2.0	Rock Problem
452	452	113+372	662827	2998936	0.0-1.0	-	1.0-1.4	1.4-2.1	Rock Problem
453	453	113+631	662593	2999014	0.0-0.9	-	0.9-1.5	1.5-2.1	Rock Problem
454	454	113+890	662371	2999111	0.0-1.0	-	1.0-1.6	1.6-2.2	Sample Collected Rock Problem
455	455	114+133	662461	2999047	0.0-1.0	-	1.0-1.5	1.5-2.1	Rock Problem
456	456	113+631	662256	2999014	0.0-1.0	-	1.0-1.6	1.6-2.0	Rock Problem
457	457	114+639	662488	2998987	0.0-1.0	-	1.0-1.5	1.5-2.0	Rock Problem
458	458	114+887	662247	2998951	0.0-1.0	-	1.0-1.4	1.4-2.1	Sample Collected Rock Problem
459	459	115+156	662043	2998810	0.0-1.0	-	1.0-1.4	1.4-2.0	Rock Problem
460	460	115+387	661864	2998702	0.0-1.0	-	1.0-1.5	1.5-2.1	Rock Problem
461	461	115+628	661642	2998635	0.0-0.9	-	0.9-1.4	1.4-2.0	Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
462	462	115+887	661525	2998465	0.0-1.0	-	1.0-1.5	1.5-2.1	Sample Collected Rock Problem
463	463	116+141	661397	2998529	0.0-0.9	-	0.9-1.6	1.6-2.0	Rock Problem
464	464	116+388	661115	2998406	0.0-1.0	-	1.0-1.5	1.5-2.1	Rock Problem
465	465	116+641	660953	2998495	0.0-1.0	-	1.0-1.5	1.5-2.1	Rock Problem
466	466	116+883	660839	2998425	0.0-1.0	-	1.0-1.4	1.4-2.0	Sample Collected Rock Problem
467	467	117+145	660769	2998221	0.0-1.0	-	1.0-1.6	1.6-2.2	Rock Problem
468	468	117+395	660568	2998143	0.0-0.9	-	0.9-1.6	1.6-1.9	Hill, Rock Problem
469	469	117+769	660316	2998308	0.0-1.0	-	1.0-1.6	1.6-2.1	Hill ,Rock Problem
470	470	117+887	660219	2998368	0.0-1.0	-	1.0-1.5	1.5-2.2	Sample Collected Rock Problem
471	471	118+137	660114	2998312	0.0-0.9	-	0.9-1.5	1.5-2.0	Hill , Rock Problem
472	472	118+403	659931	2998247	0.0-1.0	-	1.0-1.4	1.4-2.1	Hill , Rock Problem
473	473	118+641	659756	2998240	0.0-1.0	-	1.0-1.5	1.5-2.2	Hill , Rock Problem
474	474	118+888	659592	2998069	0.0-1.0	-	1.0-1.6	1.6-2.2	Sample Collected Rock Problem
475	475	118+771	659422	2998152	0.0-0.9	-	0.9-1.5	1.5-2.1	Rock Problem
476	476	119+389	659233	2998217	0.0-1.0	-	1.0-1.6	1.6-2.2	Rock Problem
477	477	119+642	659000	2998179	0.0-0.9	-	0.9-1.5	1.5-2.1	Rock Problem
478	478	119+884	658816	2998081	0.0-1.0	-	1.0-1.4	1.4-2.0	Sample Collected Rock Problem
479	479	120+137	658597	2998097	0.0-1.0	-	1.0-1.6	1.6-2.1	Hill ,Rock Problem
480	480	120+393	658380	2998154	0.0-1.0	-	1.0-1.5	1.5-2.0	Hill ,Rock Problem
481	481	120+636	658370	2998319	0.0-0.9	-	0.9-1.6	1.6-1.8	Hill ,Rock Problem
482	482	112+886	658396	2998560	0.0-0.8	-	0.8-1.2	1.2-1.9	Sample Collected Rock Problem
483	483	121+141	658491	2998790	0.0-0.7	-	0.7-1.0	1.0-1.6	Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
484	484	121+389	658419	2999013	0.0-0.6	-	0.6-1.0	1.0-1.5	Rock Problem
485	485	121+644	658265	2999199	0.0-0.8	-	0.8-1.0	1.0-1.4	Rock Problem
486	486	121+904	658122	2999388	0.0-0.9	-	0.9-1.2	1.2-1.5	Sample Collected Rock Problem
487	487	122+164	658178	2999615	0.0-0.8	-	0.8-1.0	1.0-1.4	Rock Problem
488	488	122+391	658087	2999785	0.0-0.9	-	0.9-1.2	1.2-1.6	Rock Problem
489	489	122+652	657990	3000016	0.0-0.8	-	0.8-1.1	1.1-1.5	Rock Problem
490	490	122+892	657910	3000201	0.0-0.9	-	0.9-1.2	1.2-1.6	Sample Collected Rock Problem
491	491	123+149	657665	3000374	0.0-1.0	-	-	1.0-1.4	Rock Problem
492	492	123+398	657639	3000585	0.0-0.9	-	0.9-1.2	1.2-1.5	Rock Problem
493	493	123+640	657462	3000730	0.0-0.9	-	0.9-1.1	1.1-1.6	Rock Problem
494	494	123+895	657412	3000960	0.0-0.8	-	0.8-1.3	1.3-1.7	Sample Collected
495	495	124+143	657458	3001183	0.0-0.7	-	0.7-1.2	1.2-1.5	Rock Problem
496	496	124+386	657440	3001406	0.0-0.9	-	-	0.9-1.6	Rock Problem
497	497	124+643	657526	3001637	0.0-0.9	-	0.9-1.2	1.2-1.6	Rock Problem
498	498	124+884	657614	3001846	0.0-1.0	-	1.0-1.2	1.2-1.5	Sample Collected Rock Problem
499	499	125+156	657793	3002024	0.0-0.9	-	0.9-1.3	1.3-1.7	Rock Problem
500	500	125+386	657964	3002177	0.0-1.0	-	1.0-1.2	1.2-1.6	Rock Problem
501	501	125+637	658069	3002389	0.0-0.9	-	0.9-1.2	1.2-1.7	Rock Problem
502	502	125+889	658205	3002550	0.0-1.0	-	1.0-1.3	1.3-1.7	Sample Collected Rock Problem
503	503	126+171	658352	3002660	0.0-1.0	-	1.0-1.2	1.2-1.5	Rock Problem
504	504	126+384	658395	3002630	0.0-0.9	-	0.9-1.3	1.3-1.6	Rock Problem
505	505	126+641	658616	3002695	0.0-1.0	-	1.0-1.2	1.2-1.5	Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
506	506	126+893	658719	3002923	0.0-0.9	-	0.9-1.1	1.1-1.6	Sample Collected
507	507	127+142	658813	3003147	0.0-0.8	-	0.8-1.2	1.2-1.7	Rock Problem
508	508	127+395	658924	3003367	0.0-0.7	-	0.7-1.2	1.2-1.6	Rock Problem
509	509	127+645	659082	3003508	0.0-1.0	-	1.0-1.3	1.3-1.5	Rock Problem
510	510	127+899	659136	3003746	0.0-0.9	-	0.9-1.2	1.2-1.6	Sample Collected Rock Problem
511	511	128+149	659257	3003945	0.0-1.0	-	1.0-1.2	1.2-1.8	Hill , Rock Problem
512	512	128+385	659361	3004127	0.0-0.9	-	0.9-1.2	1.2-1.9	Hill , Rock Problem
513	513	128+638	659528	3004297	0.0-0.8	-	0.8-1.0	1.0-1.8	Hill , Rock Problem
514	514	128+898	659623	3004524	0.0-0.8	-	0.8-1.2	1.2-1.7	Sample Collected Rock Problem
515	515	129+137	659792	3004670	0.0-0.5	-	0.5-0.7	0.7-1.1	Rock Problem
516	516	129+406	659879	3004900	0.0-0.4	-	0.4-0.8	0.8-1.3	Rock Problem
517	517	129+643	660024	3005072	0.0-0.8	-	0.8-1.0	1.0-1.5	Rock Problem
518	518	129+892	660156	3005274	0.0-0.9	-	0.9-1.3	1.3-1.5	Sample Collected Rock Problem
519	519	130+144	660152	3005178	0.0-0.8	-	0.8-1.0	1.0-1.6	Rock Problem
520	520	130+385	660135	3005042	0.0-1.0	-	1.0-1.2	1.2-1.5	Rock Problem
521	521	130+639	660279	3005212	0.0-0.9	-	0.9-1.3	1.3 -1.6	Rock Problem
522	522	130+888	660418	3005408	0.0-0.8	-	0.8-1.2	1.2-1.6	Sample Collected Rock Problem
523	523	131+133	660482	3005410	0.0-0.7	-	0.7-1.3	1.3-1.5	Rock Problem
524	524	131+385	660603	3005411	0.0-1.0	-	1.0-1.4	1.4-1.9	Rock Problem
525	525	130+766	660541	3005320	0.0-0.9	-	0.9-1.3	1.3-2.0	Rock Problem
526	526	131+898	660661	3005377	0.0-1.0	-	1.0-1.2	1.2-1.8	Sample Collected Rock Problem
527	527	132+139	660722	3005483	0.0-0.9	-	0.9-1.1	1.1-1.6	Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
528	528	132+390	660778	3005335	0.0-0.8	-	0.8-1.2	1.2-1.7	Rock Problem
529	529	132+642	660715	3005153	0.0-0.9	-	0.9-1.3	1.3-1.8	Rock Problem
530	530	132+878	660743	3005139	0.0-1.0	-	1.0-1.3	1.3-1.7	Sample Collected
531	531	133+142	660896	3005302	0.0-0.9	-	0.9-1.2	1.2-1.8	Rock Problem
532	532	133+389	660883	3005265	0.0-1.0	-		1.0-1.6	Rock Problem
533	533	133+637	660908	3005263	0.0-1.0	-	1.0-1.3	1.3-1.8	Rock Problem
534	534	133+879	660956	3005267	0.0-0.9	-	0.9- 1.2	1.2-1.9	Sample Collected Rock Problem
535	535	134+138	661022	3005257	0.0-0.8	-	0.8-1.3	1.3-1.8	Rock Problem
536	536	134+383	661065	3005208	0.0-0.9	-	0.9-1.2	1.2-1.9	Rock Problem
537	537	134+634	660972	3005021	0.0-1.0	-	1.0-1.5	1.5-2.0	Rock Problem
538	538	134+884	661018	3005078	0.0-1.0	-	1.0-1.4	1.4-2.0	Sample Collected Rock Problem
539	539	135+152	661158	3005256	0.0-0.9	-	0.9-1.3	1.3-1.9	Rock Problem
540	540	135+396	661198	3005215	0.0-0.8	-	0.8-1.3	1.3-2.0	Rock Problem
541	541	135+640	661213	3005158	0.0-1.0	-	1.0-1.4	1.4-2.0	Rock Problem
542	542	135+888	661358	3005317	0.0-1.0	-	1.0- 1.3	1.3-1.9	Sample Collected Rock Problem
543	543	136+142	661190	3005405	0.0-0.9	-	0.9-1.5	1.5-2.0	Rock Problem
544	544	136+391	661084	3005608	0.0-1.0	-	1.0-1.4	1.4-2.1	Rock Problem
545	545	136+640	660936	3005790	0.0-0.9	-	0.9-1.4	1.4 -2.1	Rock Problem
546	546	136+892	660855	3005998	0.0-0.1	-	1.0- 1.4	1.4-2.10	Sample Collected Rock Problem
547	547	137+135	660883	3006215	0.0-0.9	-	0.9-1.4	1.4-2.2	Rock Problem
548	548	137+390	660963	3006287	0.0-1.0	-	1.0-1.3	1.3-2.0	Rock Problem
549	549	137+640	660909	3006056	0.0-0.9	-	0.9-1.4	1.4-2.1	Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
550	550	137+765	661305	3005875	0.0-1.0	-	1.0-1.3	1.3-2.1	Sample Collected Rock Problem
551	551	138+131	661116	3005834	0.0-0.9	-	0.9- 1.4	1.4-1.9	Rock Problem
552	552	138+382	661028	3006053	0.0-1.0	-	1.0-1.2	1.2-1.7	Rock Problem
553	553	138+635	661077	3006071	0.0-1.0	-	1.0-1.3	1.3-1.6	Rock Problem
554	554	138+894	661206	3005868	0.0-0.8	-	-	0.8-1.8	Sample Collected Rock Problem
555	555	139+137	661374	3005831	0.0-1.0	-	-	1.0-1.7	Rock Problem
556	556	139+387	661577	3005761	0.0-0.9	-	-	0.9-1.8	Rock Problem
557	557	139+637	661572	3005592	0.0-1.0	-	-	1.0-1.7	Rock Problem
558	558	139+895	661685	3005404	0.0-1.0	-	-	1.0-1.7	Sample Collected Rock Problem
559	559	140+148	661796	3005244	0.0-0.9	-	0.9-1.4	1.4- 1.8	Rock Problem
560	560	140+390	661951	3005099	0.0-0.8	-	0.8-1.4	1.4-1.9	Rock Problem
561	561	140+642	661823	3004896	0.0-0.9	-	-	0.9-1.6	Rock Problem
562	562	140+893	661829	3004716	0.0-0.9	-	-	0.9-1.5	Sample Collected Rock Problem
563	563	141+139	661818	3004501	0.0-1.0	-	1.0-1.3	1.3-1.6	Rock Problem
564	564	141+391	661809	3004284	0.0-0.9	-	0.9-1.2	1.2-1.4	Rock Problem
565	565	141+636	661840	3004248	0.0-0.8	-	0.8-1.2	1.2-1.5	Rock Problem
566	566	141+886	661869	3004345	0.0-0.9	-	0.9-1.3	1.3-1.6	Sample Collected Rock Problem
567	567	142+140	661990	3004532	0.0-1.0	-	-	1.0-1.5	Rock Problem
568	568	142+402	661955	3004767	0.0-0.9	-	0.9-1.4	1.4-1.7	Rock Problem
569	569	142+635	662074	3004948	0.0-1.0	-	-	1.0-1.6	Rock Problem
570	570	134+017	662127	3005182	0.0-0.9	-	0.9-1.3	1.3-1.8	Sample Collected Rock Problem
571	571	143+139	662099	3005314	0.0-1.0	-	1.0-1.3	1.3-1.5	Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
572	572	143+393	662189	3005251	0.0-0.9	-	0.9-1.4	1.4-1.9	Rock Problem
573	573	143+643	662147	3005486	0.0-1.0	-	-	1.0-1.6	Rock Problem
574	574	143+890	662101	3005722	0.0-1.0	-	-	1.0-1.7	Sample Collected Rock Problem
575	575	144+008	662029	3005815	0.0-0.8	-	0.8-1.3	1.3 -1.8	Small River Crossing Rock Problem
576	576	144+138	662077	3005913	0.0-1.0	-	-	1.0-1.6	Small River Crossing Rock Problem
577	577	144+443	662022	3006157	0.0-0.9	-	-	0.9-1.7	Rock Problem
578	578	144+642	662216	3006270	0.0-1.0	-	-	1.0-1.6	Rock Problem
579	579	144+893	662149	3006461	0.0-1.0	-	1.0-1.2	1.2-1.9	Sample Collected Rock Problem
580	580	145+125	662093	3006631	0.0-0.8	-	0.8-1.4	1.4-1.7	Rock Problem
581	581	145+389	661946	3006838	0.0-0.9	-	-	0.9-1.6	Rock Problem
582	582	145+638	661794	3007025	0.0-1.0	-	-	1.0-1.8	Rock Problem
583	583	145+895	661630	3007168	0.0-1.0	-	-	1.0-1.7	Sample Collected Rock Problem
584	584	146+136	661518	3007367	0.0-0.8	-	0.8-1.3	1.3-1.6	Rock Problem
585	585	146+396	661685	3007177	0.0-0.9	-	-	0.9-1.5	Rock Problem
586	586	146+640	661894	3007081	0.0-1.0	-	1.0-1.4	1.4-1.8	Rock Problem
587	587	146+888	662061	3006975	0.0-1.0	-	1.0-1.3	1.3-1.7	Sample Collected Rock Problem
588	588	147+145	662231	3006863	0.0-0.9	-	0.9 - 1.3	1.3-1.8	Rock Problem
589	589	147+389	662440	3006781	0.0-0.8	-	0.8-1.2	1.2-1.7	Rock Problem
590	590	147+639	662573	3006601	0.0-0.9	-	0.9-1.3	1.3-1.6	Rock Problem
591	591	147+897	662594	3006610	0.0-0.8	-	0.8-1.3	1.3-1.6	Sample Collected Rock Problem
592	592	148+137	662514	3006834	0.0-1.0	-	-	1.0-1.7	Rock Problem
593	593	148+397	662351	3007007	0.0-0.8	-	0.8-1.4	1.4-1.8	Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
594	594	148+644	662235	3007197	0.0-1.0	-	1.0-1.3	1.3-1.7	Rock Problem
595	595	148+892	662033	3007316	0.0-1.0	-	1.0-1.4	1.4-1.8	Sample Collected Rock Problem
596	596	149+150	661880	3007426	0.0-0.8	-	0.8-1.2	1.2-1.6	Rock Problem
597	597	149+390	661875	3007654	0.0-1.0	-	1.0-1.3	1.3-1.7	Rock Problem
598	598	149+635	661740	3007853	0.0-0.8	-	0.8-1.4	1.4-1.8	Rock Problem
599	599	149+882	661556	3007997	0.0-1.0	-	-	1.0-1.9	Sample Collected Rock Problem
600	600	150+139	661314	3008076	0.0-1.0	-	-	1.0-1.7	Rock Problem
601	601	150+393	661139	3008241	0.0-1.0	-		1.0-1.6	Rock Problem
602	602	150+637	660928	3008346	0.0-0.9	-	0.9-1.4	1.4-1.7	Rock Problem
603	603	150+887	661122	3008422	0.0-0.8	-	0.8-1.2	1.2-1.6	Sample Collected Rock Problem
604	604	151+128	661054	3008424	0.0-0.8	-	0.8-1.3	1.3-1.7	Rock Problem
605	605	151+376	660952	3008510	0.0-0.9	-	0.9-1.2	1.2-1.8	Rock Problem
606	606	151+640	661184	3008578	0.0-1.0	-	-	1.0-1.6	Rock Problem
607	607	151+888	661336	3008717	0.0-1.0	-	-	1.0-1.8	Sample Collected Rock Problem
608	608	152+142	661288	3008696	0.0-0.9	-	0.9 -1.3	1.3-1.8	Rock Problem
609	609	152+394	661077	3008639	0.0-0.8	-	0.8-1.3	1.3-1.7	Rock Problem
610	610	152+640	661061	3008669	0.0-0.9	-	-	0.9-1.6	Rock Problem
611	611	152+894	661253	3008793	0.0-1.0	-	-	1.0-1.7	Sample Collected Rock Problem
612	612	153+142	661137	3009001	0.0-0.9	-	0.9-1.4	1.4-1.8	Rock Problem
613	613	153+397	661140	3008903	0.0-0.8	-	0.8-1.2	1.2-1.7	Rock Problem
614	614	153+507	661004	3008820	0.0-0.9	-		0.9-1.6	Rock Problem
615	615	153+888	660773	3008762	0.0-0.8	-	0.8-1.2	0.8-1.5	Sample Collected Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
616	616	154+139	660758	3008810	0.0-1.0	-	-	1.0-1.6	Rock Problem
617	617	154+387	660972	3008909	0.0-0.9	-	0.9-1.2	1.2-1.7	Rock Problem
618	618	154+650	660935	3008977	0.0-1.0	-	-	1.0-1.6	Rock Problem
619	619	154+893	660744	3008892	0.0-1.0	-	-	1.0-1.6	Sample Collected Rock Problem
620	620	155+138	660662	3008928	0.0-1.0	-	-	1.0-1.6	Rock Problem
621	621	155+393	660813	3009020	0.0-1.0	-	1.0-1.2	1.2-1.7	Rock Problem
622	622	155+647	660586	3008976	0.0-1.0	-	1.0-1.3	1.3-1.8	Rock Problem
623	623	155+896	660358	3009002	0.0-1.0	-	1.0-1.4	1.4-1.8	Sample Collected Rock Problem
624	624	156+148	660108	3009005	0.0-0.9	-	0.9-1.2	1.2-1.7	Rock Problem
625	625	156+455	659827	3008900	0.0-1.0	-	-	1.0-1.8	Rock Problem
626	626	156+638	659650	3008882	0.0-0.8	-	0.8-1.3	1.3-1.9	Rock Problem
627	627	156+894	659461	3008895	0.0-0.9	-	0.9-1.2	1.2-1.7	Sample Collected Rock Problem
628	628	157+159	659282	3009026	0.0-1.0	-	-	1.0-2.0	River Crossing Rock Problem
629	629	157+386	659388	3009178	0.0-1.0	1.0-1.2	-	1.2-2.2	River Crossing Rock Problem
630	630	157+644	659590	3009154	0.0-1.0	-	1.0-1.2	1.2-1.4	Rock Problem
631	631	157+881	659530	3009280	0.0-0.9	-	0.9-1.4	1.4-1.7	Sample Collected Rock Problem
632	632	158+143	659323	3009255	0.0-1.0	-	1.0-1.4	1.4-1.8	Rock Problem
633	633	158+387	659336	3009372	0.0-0.9	-	0.9-1.3	1.3-1.7	Rock Problem
634	634	158+636	659150	3009517	0.0-1.0	-	1.0-1.2	1.2-1.8	Rock Problem
635	635	158+886	659209	3009569	0.0-1.0	-	1.0-1.3	1.3-1.6	Sample Collected Rock Problem
636	636	159+146	659375	3009603	0.0-0.8	-	0.8-1.3	1.3-1.5	Rock Problem
637	637	159+389	659315	3009832	0.0-0.7	-	0.7-1.2	1.2-1.7	Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
638	638	159+638	659383	3010064	0.0-0.9	-	0.9-1.4	1.4-1.8	Rock Problem
639	639	159+897	659456	3010289	0.0-1.0	-	-	1.0-1.6	Sample Collected Rock Problem
640	640	160+136	659440	3010422	0.0-0.8	-	0.8-1.2	1.2-1.8	Rock Problem
641	641	160+398	659344	3010209	0.0-0.9	-	-	0.9-1.6	Rock Problem
642	642	160+637	659273	3009998	0.0-1.0	-	-	1.0-1.5	Rock Problem
643	643	160+896	659193	3009757	0.0-1.0	-	-	1.0-1.6	Sample Collected Rock Problem
644	644	161+146	659183	3009847	0.0-1.0	-	1.0-1.3	1.3-1.5	Rock Problem
645	645	161+390	659230	3010081	0.0-0.9	-	0.9-1.2	1.2-1.4	Rock Problem
646	646	161+650	659240	3010281	0.0-1.0	-	1.0-1.3	1.3-1.6	Rock Problem
647	647	161+890	659296	3010493	0.0-1.0	-	1.0-1.4	1.4-1.8	Sample Collected Rock Problem
648	648	162+136	659352	3010726	0.0-0.9	-	0.9-1.3	1.3-1.7	Rock Problem
649	649	162+395	659389	3010967	0.0-1.0	-		1.0-1.6	Rock Problem
650	650	162+648	659282	3011183	0.0-1.0	-	1.0-1.3	1.3-1.6	Rock Problem
651	651	162+890	659333	3010959	0.0-0.9	-	0.9-1.4	1.4-1.8	Sample Collected Rock Problem
652	652	163+137	659264	3010966	0.0-1.0	-		1.0-1.7	Rock Problem
653	653	163+384	659214	3010800	0.0-0.9	-	0.9-1.3	1.3-1.6	Rock Problem
654	654	163+642	659183	3010879	0.0-1.0	-	-	1.0-1.5	Rock Problem
655	655	163+889	659119	3010653	0.0-1.0	-	-	1.0-1.9	Sample Collected Rock Problem
656	656	164+141	659055	3010412	0.0-0.9	-	-	0.9-1.6	Rock Problem
657	657	164+392	658952	3010218	0.0-1.0	-	1.0-1.3	1.3-1.8	Rock Problem
658	658	164+634	658858	3010020	0.0-1.0	-	-	1.0-1.7	Rock Problem
659	659	164+890	658908	3010244	0.0-0.9	-	0.9-1.2	1.2-1.8	Sample Collected Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
660	660	165+137	658909	3010465	0.0-1.0	-	1.0-1.3	1.3-1.7	Rock Problem
661	661	165+402	658959	3010720	0.0-1.0	-	-	1.0-1.8	Rock Problem
662	662	165+639	658968	3010954	0.0-1.0	-	1.0-1.2	1.2-1.7	Rock Problem
663	663	165+882	658885	3010744	0.0-1.0	-	1.0-1.4	1.4-2.0	Sample Collected Rock Problem
664	664	166+126	658809	3010513	0.0-1.0	-	-	1.0-1.8	Rock Problem
665	665	166+389	658732	3010269	0.0-0.9	-	0.9-1.4	1.4-1.9	Rock Problem
666	666	166+633	658590	3010148	0.0-0.8	-	0.8-1.3	1.3-1.8	Rock Problem
667	667	166+884	658550	3010019	0.0-1.0	-	-	1.0-1.9	Sample Collected Rock Problem
668	668	167+139	658580	3010229	0.0-0.9	-	-	0.9-1.6	Rock Problem
669	669	167+388	658703	3010429	0.0-1.0	-	1.0-1.3	1.3-1.7	Rock Problem
670	670	167+644	658718	3010681	0.0-0.8	-	0.8-1.4	1.4-1.9	Rock Problem
671	671	167+891	658713	3010920	0.0-0.9	-	0.9-1.5	1.5 -1.9	Sample Collected Rock Problem
672	672	168+141	658650	3011125	0.0-1.0	-	1.0-1.2	1.2-1.8	Rock Problem
673	673	168+380	658739	3011308	0.0-0.9	-	0.9-1.5	1.5-2.0	Rock Problem
674	674	168+638	658753	3011511	0.0-1.0	-	-	1.0-2.0	Rock Problem
675	675	168+880	658684	3011503	0.0-1.0	-	1.0-1.4	1.4-2.1	Sample Collected Rock Problem
676	676	169+140	658756	3011412	0.0-0.9	-	0.9-1.5	1.5-1.9	Rock Problem
677	677	169+386	658630	3011578	0.0-1.0	-	1.0-1.4	1.4-2.0	Rock Problem
678	678	169+636	658478	3011746	0.0-1.1	-	1.1-1.3	1.3-1.9	Rock Problem
679	679	169+883	658386	3011797	0.0-1.0	-	1.0-1.5	1.5-2.2	Sample Collected Rock Problem
680	680	169+386	658512	3011578	0.0-1.2	-	-	1.2-2.1	Rock Problem
681	681	170+387	658510	3011536	0.0-1.0	-	1.0-1.3	1.3-2.0	Rock Problem

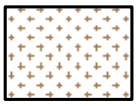
SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
682	682	170+638	658367	3011737	0.0-1.2	-	1.2-1.6	1.6-2.5	Rock Problem
683	683	170+896	658164	3011802	0.0-1.1	-	1.1-1.5	1.5-2.5	Sample Collected
684	684	171+138	658177	3012006	0.0-1.0	-	1.0-1.4	1.4-2.0	Rock Problem
685	685	171+393	658108	3012191	0.0-1.1	-	1.1-1.3	1.3-1.9	Rock Problem
686	686	171+642	657915	3012337	0.0-1.0	-	-	1.0-2.0	Rock Problem
687	687	171+902	657890	3012574	0.0-1.1	-	1.1-1.2	1.2-2.1	Sample Collected Rock Problem
688	688	172+143	657991	3012768	0.0-1.2	-	1.2-1.5	1.5-2.2	Rock Problem
689	689	172+388	658065	3012993	0.0-1.3	-	-	1.3-2.3	Rock Problem
690	690	172+634	658048	3013238	0.0-1.1	-	1.1-1.6	1.6-2.2	Rock Problem
691	691	172+891	658001	3013001	0.0-1.2	-	-	1.2-2.2	Sample Collected Rock Problem
692	692	173+136	657853	3012832	0.0-1.1	-	1.1-1.6	1.6-2.0	Rock Problem
693	693	173+402	657699	3012639	0.0-1.2	-		1.2-2.1	Rock Problem
694	694	173+635	657620	3012430	0.0-1.1	-	1.1-1.5	1.5-2.2	Rock Problem
695	695	173+889	657661	3012660	0.0-1.2	-	-	1.2-2.1	Sample Collected Rock Problem
696	696	174+137	657687	3012895	0.0-1.0	-	1.0-1.4	1.4-1.3	Rock Problem
697	697	174+395	657781	3013123	0.0-1.0	-	-	1.0-1.7	Rock Problem
698	698	174+638	657762	3013342	0.0-1.2	-	1.2-1.4	1.4-2.0	Rock Problem
699	699	174+887	657742	3013556	0.0-1.1	-	1.1-1.5	1.5-2.1	Sample Collected Rock Problem
700	700	175+157	657799	3013756	0.0-1.0	-	1.0-1.6	1.6-2.0	Rock Problem
701	701	175+400	657720	3013650	0.0-1.1	-	1.1-1.5	1.5-2.1	Rock Problem
702	702	175+661	657739	3013863	0.0-1.0	-	-	1.0-1.8	Rock Problem
703	703	175+895	657891	3014050	0.0-1.0		1.0-1.2	1.2-1.6	Sample Collected Rock Problem

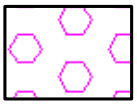
SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
704	704	176+145	-	-	-	-	-	-	City, Cement area
705	705	176+395	-	-	-	-	-	-	City, Cement area
706	706	176+638	658327	3014429	0.0-1.0	-		1.0-1.5	Rock Problem
707	707	176+888	658552	3014488	0.0-0.8	-	0.8-1.2	1.2-1.6	Sample Collected Rock Problem
708	708	177+136	658782	3014515	0.0-0.7	-	0.7-1.1	1.1-1.4	Rock Problem
709	709	177+396	659015	3014588	0.0-1.0	-	-	1.0-1.6	Rock Problem
710	710	177+646	659101	3014759	0.0-1.1	-	1.1-1.3	1.3-1.7	Sample Collected Rock Problem
711	711	177+887	659148	3014940	0.0-1.2	-	1.2-1.4	1.4-1.8	Rock Problem
712	712	178+143	659103	3014903	0.0-1.0	-	-	1.0-1.7	Rock Problem
713	713	178+397	659035	3014682	0.0-1.2	-	-	1.2-1.8	Rock Problem
714	714	178+646	658838	3014684	0.0-1.1	-	1.1-1.2	1.2-1.7	Rock Problem
715	715	178+899	658604	3014620	0.0-1.1	-	1.1-1.3	1.3-2.0	Sample Collected Rock Problem
716	716	179+129	658383	3014650	0.0-1.0	-	-	1.0-2.0	Rock Problem
717	717	179+396	658234	3014836	0.0-1.1	-	1.1-1.4	1.4-2.1	Rock Problem
718	718	179+643	658086	3014994	0.0-1.2	-	1.2-1.6	1.6-2.2	Rock Problem
719	719	179+898	657998	3015196	0.0-1.1	-	1.1-1.5	1.5-2.1	Sample Collected Rock Problem
720	720	180+129	658006	3015086	0.0-1.2	-	-	1.2-1.8	Rock Problem
721	721	180+396	658201	3014930	0.0-1.1	-	1.1-1.6	1.6-2.1	Rock Problem
722	722	180+641	658407	3014808	0.0-1.2	-	1.2-1.5	1.5-2.0	Rock Problem
723	723	180+899	658648	3014790	0.0-1.1	-	1.1-1.4	1.4-2.2	Sample Collected Rock Problem
724	724	179+396	658875	3014836	0.0-1.0	-	1.0-1.3	1.3-3.1	Rock Problem
725	725	181+404	658908	3015082	0.0-1.1	-	1.1-1.4	1.4-2.0	Rock Problem

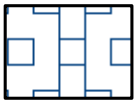
SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
726	726	181+640	658959	3015237	0.0-1.1	-	1.0-1.2	1.2-1.9	Rock Problem
727	727	181+903	658844	3015024	0.0-1.4	-	-	1.4-2.2	Sample Collected Rock Problem
728	728	182+137	658831	3015190	0.0-1.1	-	1.1-1.3	1.3-1.9	Rock Problem
729	729	182+388	658998	3015350	0.0-1.2	-	-	1.2-1.8	Rock Problem
730	730	182+667	659185	3015405	0.0-1.3	-	-	1.3-2.0	Rock Problem
731	731	182+899	659099	3015531	0.0-1.1	-	1.1-1.3	1.3-2.1	Sample Collected Rock Problem
732	732	183+139	658893	3015572	0.0-1.1	-	-	1.1-2.0	Rock Problem
733	733	183+386	658762	3015409	0.0-1.2	-	1.2-1.5	1.5-2.1	Rock Problem
734	734	183+634	658817	3015639	0.0-1.1	-	1.1-1.3	1.3-2.2	Rock Problem
735	735	183+887	658793	3015706	0.0-1.3	-	1.3-1.6	1.6-2.5	Sample Collected
736	736	184+148	658710	3015719	0.0-1.2	-	-	1.2-2.4	Rock Problem
737	737	184+388	658867	3015810	0.0-1.3	-	1.3-1.5	1.5-2.5	Normal Soil And Rock
738	738	184+634	658660	3015841	0.0-1.1	-	-	1.1-2.3	Rock Problem
739	739	184+887	658561	3016074	0.0-1.2	-	-	1.2-2.5	Sample collected
740	740	185+149	658626	3016282	0.0-1.1	-	1.1-1.5	1.5-2.4	Rock Problem
741	741	185+400	658492	3016470	0.0-1.2	-	1.2-1.4	1.4-2.3	Rock Problem
742	742	185+637	658496	3016627	0.0-1.1	-	1.1-1.3	1.3-2.5	Normal Soil And Rock
743	743	185+894	658340	3016824	0.0-1.3	-	-	1.3-2.2	Sample Collected
744	744	186+156	658194	3016990	0.0-1.0	-	-	1.0-1.8	Rock Problem
745	745	186+415	658006	3017142	0.0-1.2	-	-	1.2-1.9	Rock Problem
746	746	186+688	657750	3017199	0.0-1.3	-	-	1.3-2.0	Rock Problem
747	747	186+895	657876	3017316	0.0-1.0	-	1.0-1.4	1.4-2.0	Sample Collected Rock Problem

SL. No.	Borehole No.	Actual Chainage (Km)	Easting	Northing	Depth & Type of soil from ground level				Remarks
					Clay	Sandy	Murrum	Hard Rock	
748	748	187+132	657970	3017368	0.0-1.2	-	-	1.2-1.9	Rock Problem
749	749	187+384	657730	3017326	0.0-1.0	-	1.0-1.2	1.2-2.2	Rock Problem
750	750	187+636	657910	3017410	0.0-1.1	-	1.1-1.3	1.3-2.1	Rock Problem
751	751	187+884	658116	3017519	0.0-1.1	-	1.1-1.3	1.3-2.2	Nala Crossing Sample Collected
752	752	188+138	657931	3017649	0.0-1.0	-	-	1.0-1.9	Rock Problem
753	753	188+375	657970	3017868	0.0-1.4	-	1.4-1.6	1.6-2.2	Rock Problem
754	754	188+528	657990	3018009	0.0-1.5	-	1.5-2.5	-	Normal Soil

SOIL LEGENDS

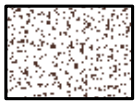

SAND (SP)

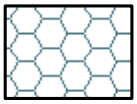

SANDY CLAY (SC)

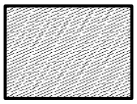

GRAVELLY CLAY

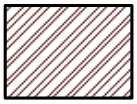
CLAY (CH)

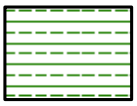
CLAYEY SILT (MI)

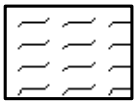

WEATHERED ROCK (WR)

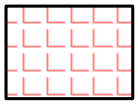

SILTY SAND WITH


SAND

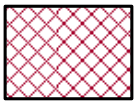

SILTY CLAY (CL)

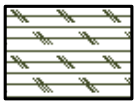

MURRUM (LA)


BLACK COTTON SOIL (BC)


SANDY SILT (SM)

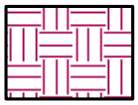
SILTY SAND (SM)


SANDY CLAY WITH GRAVELS (GC)


SILTY CLAY WITH GRAVELS

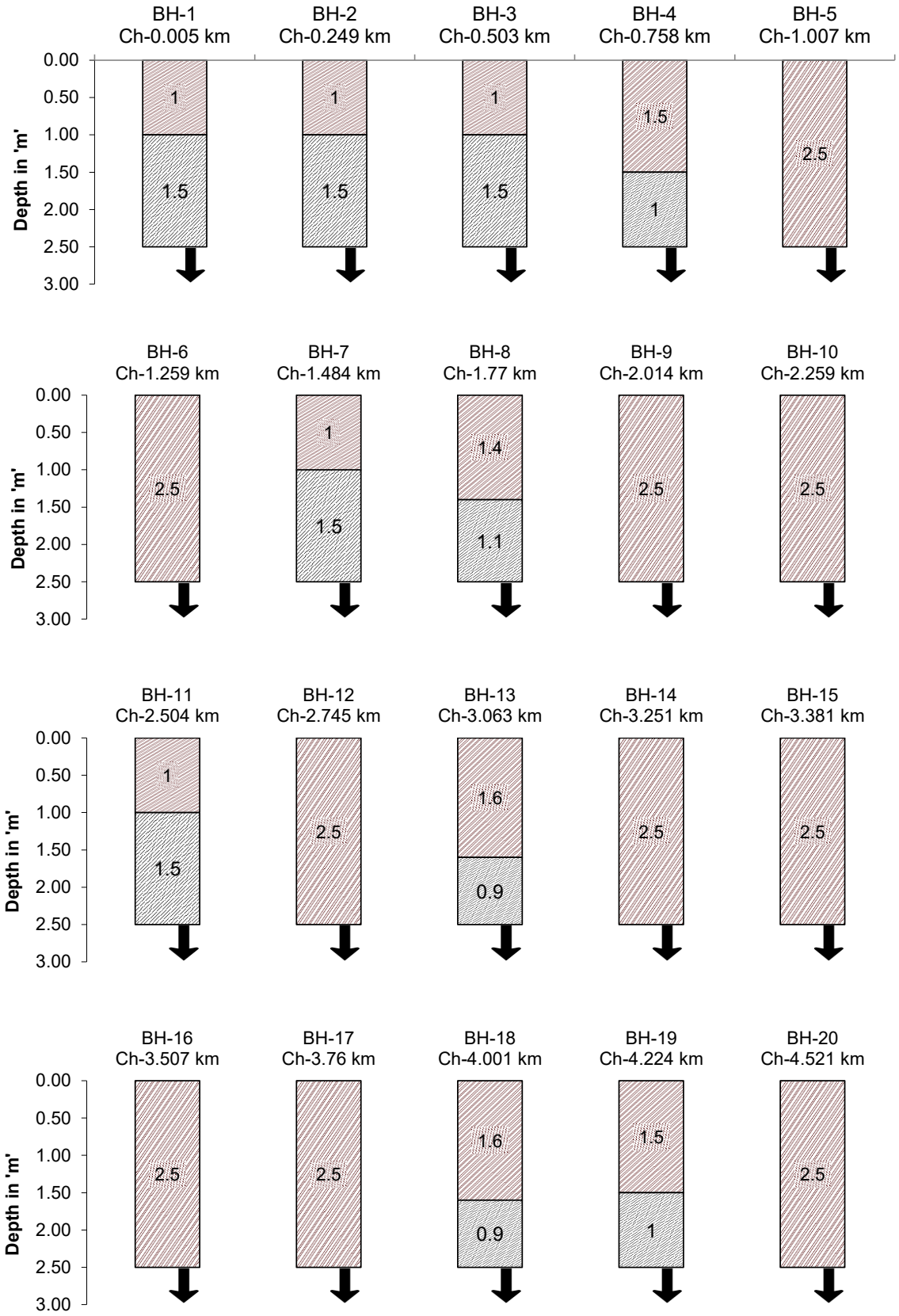
CLAYEY SAND WITH GRAVELS (GM)

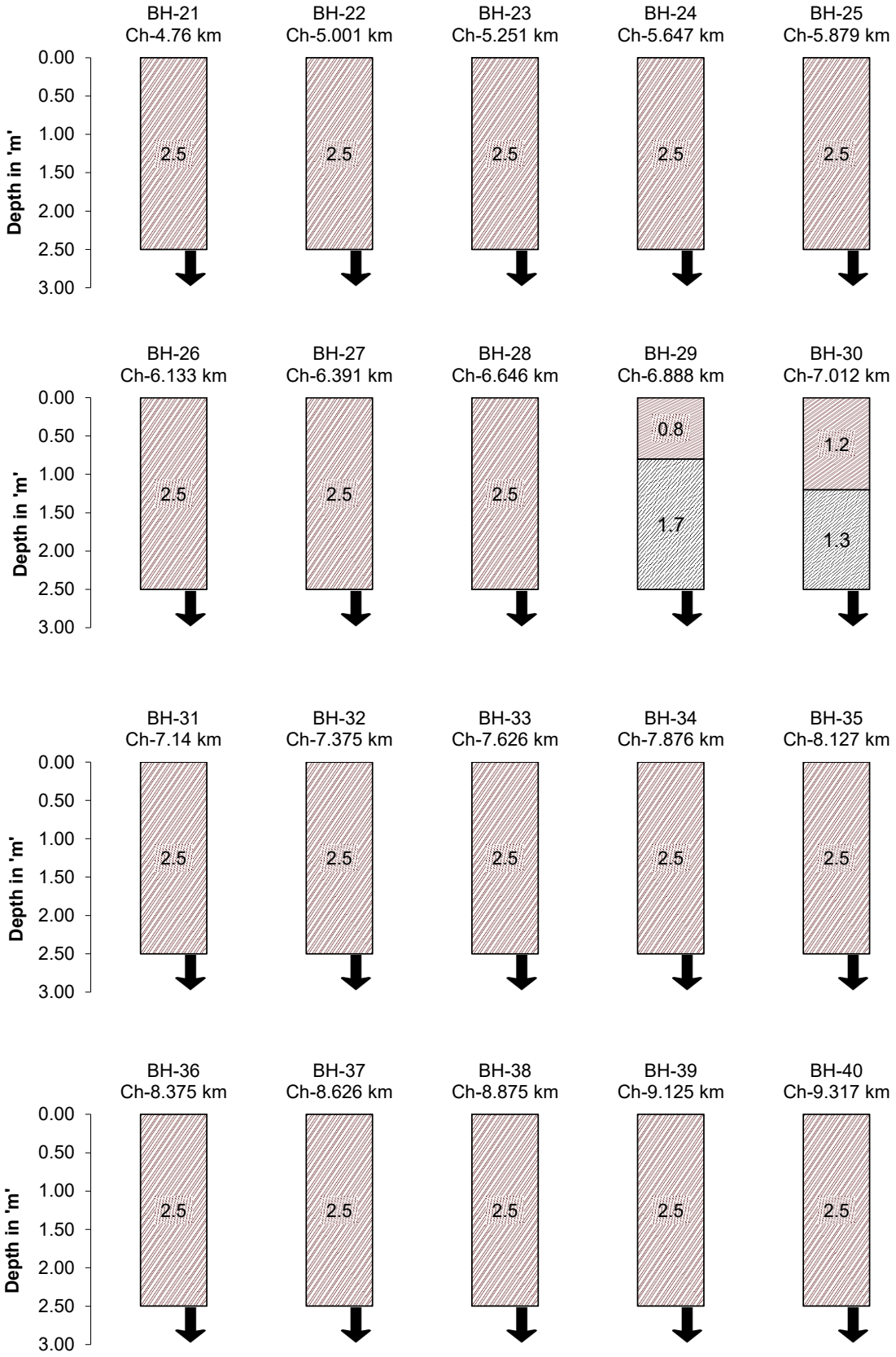
BOULDERS + SOFT ROCK

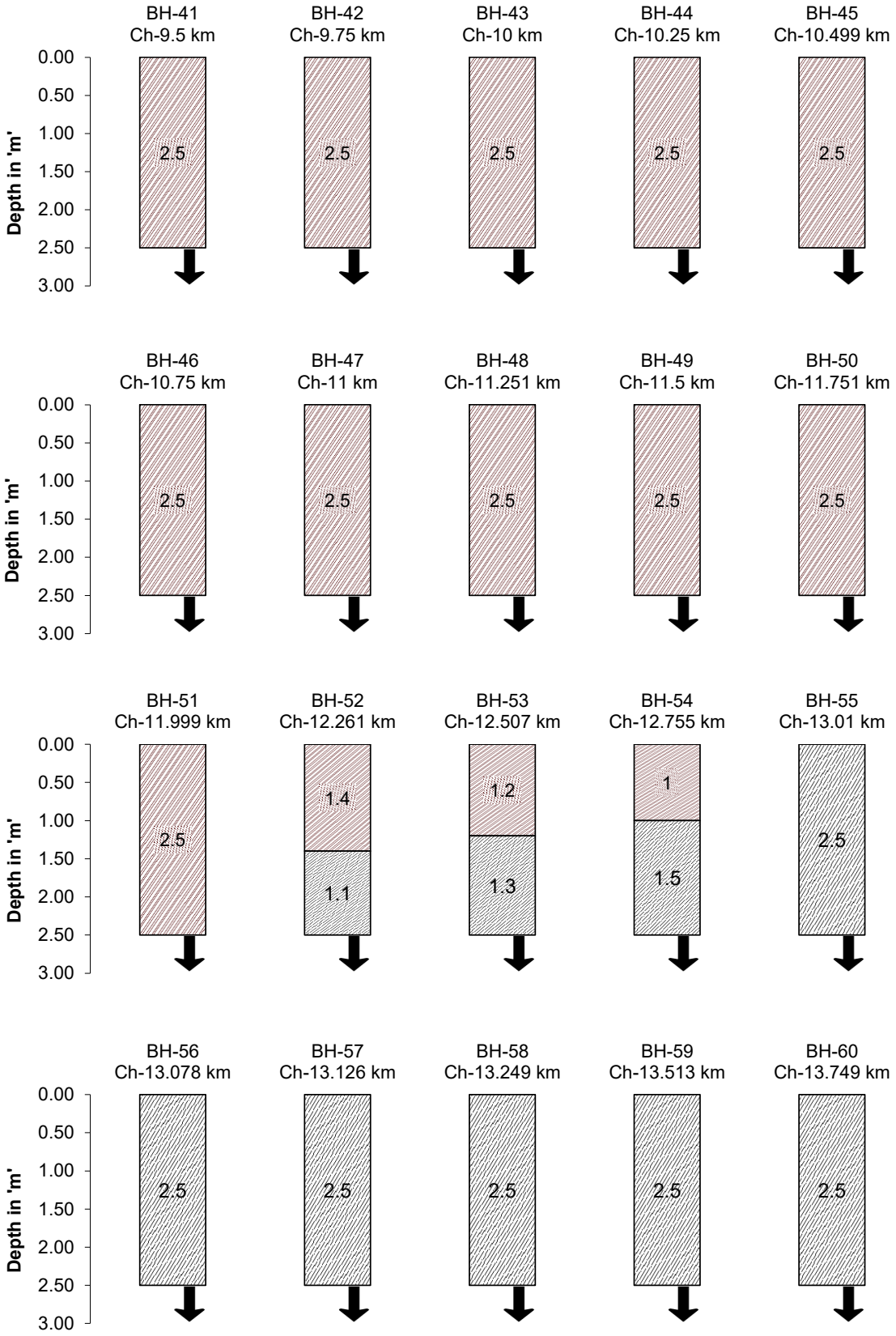

SAND WITH GRAVELS (GP)

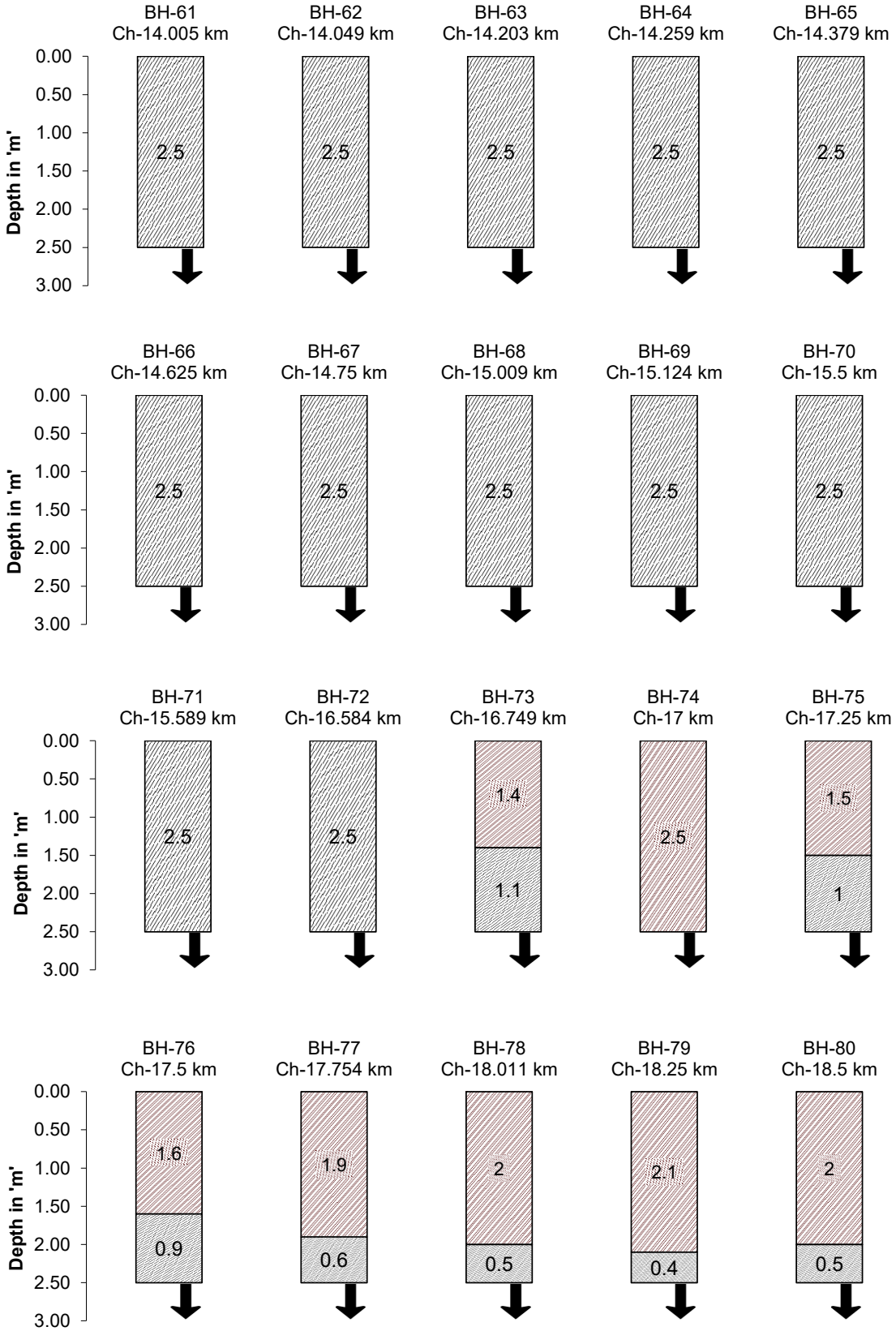
REFUSAL

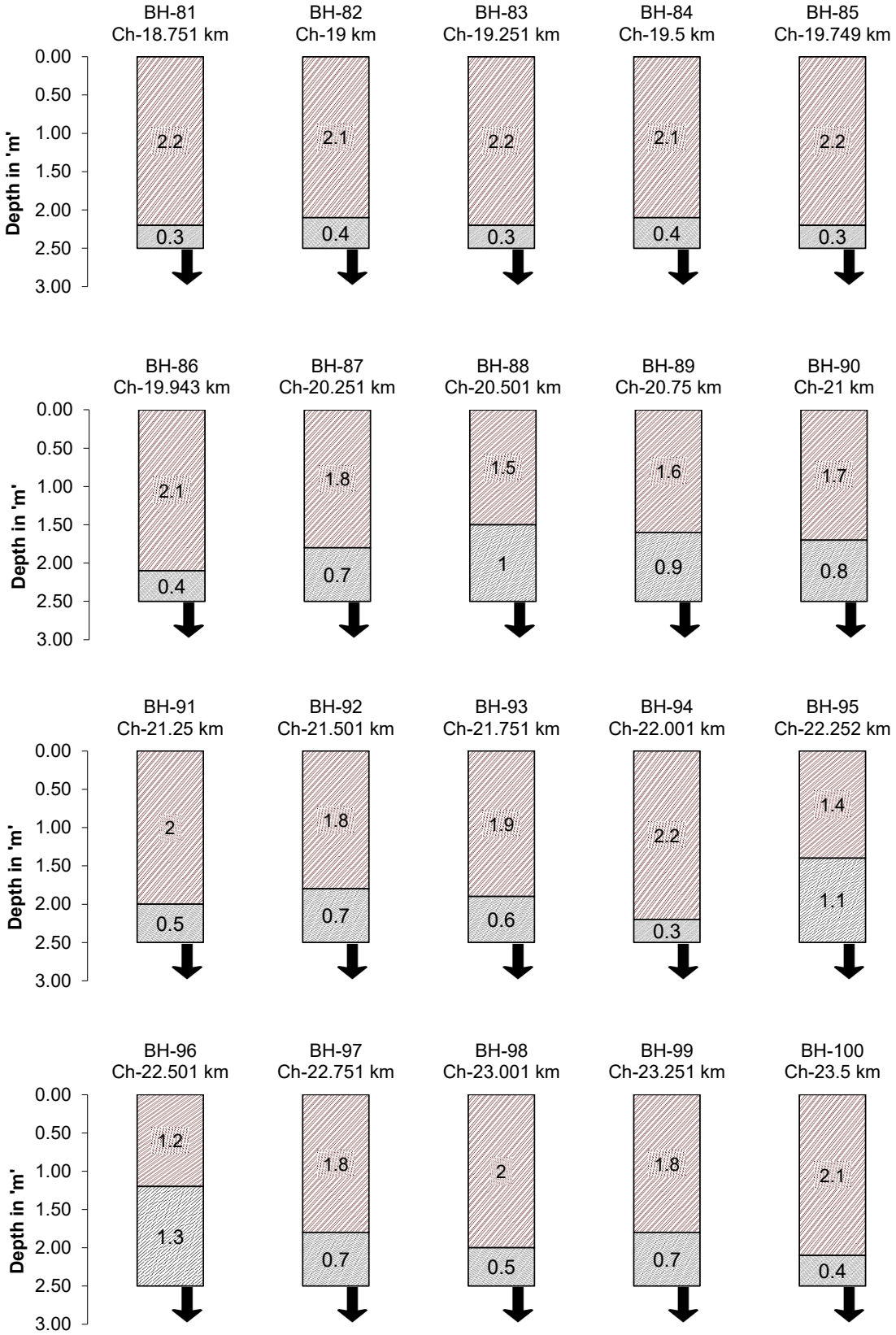
BORELOGS FOR SOIL STRATIFICATIONS

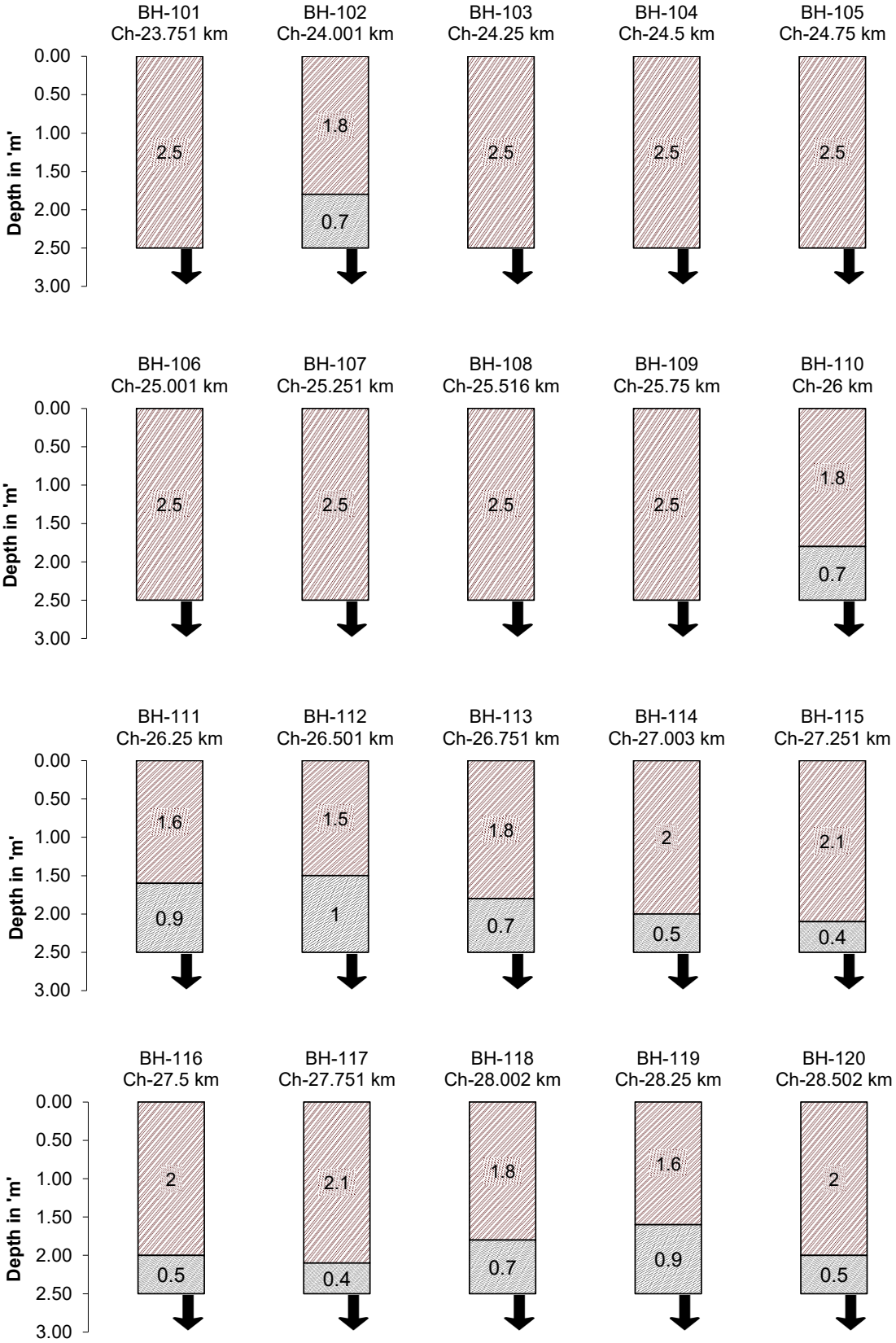


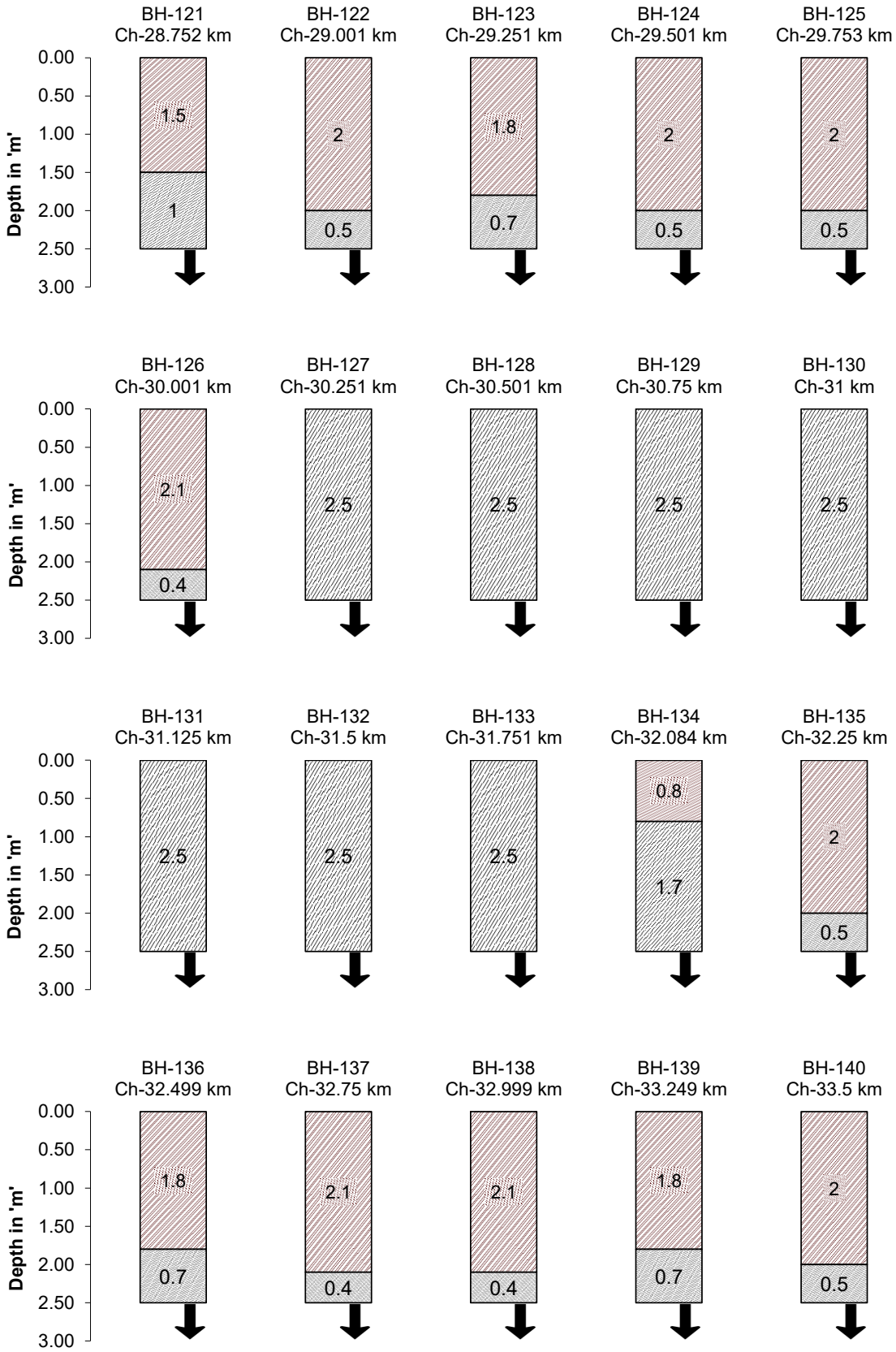

BH-21
Ch-4.76 km
BH-22
Ch-5.001 km
BH-23
Ch-5.251 km
BH-24
Ch-5.647 km
BH-25
Ch-5.879 km
BH-26
Ch-6.133 km
BH-27
Ch-6.391 km
BH-28
Ch-6.646 km
BH-29
Ch-6.888 km
BH-30
Ch-7.012 km
BH-31
Ch-7.14 km
BH-32
Ch-7.375 km
BH-33
Ch-7.626 km
BH-34
Ch-7.876 km
BH-35
Ch-8.127 km
BH-36
Ch-8.375 km
BH-37
Ch-8.626 km
BH-38
Ch-8.875 km
BH-39
Ch-9.125 km
BH-40
Ch-9.317 km
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00
2.5
0.8
1.7
1.2
1.3

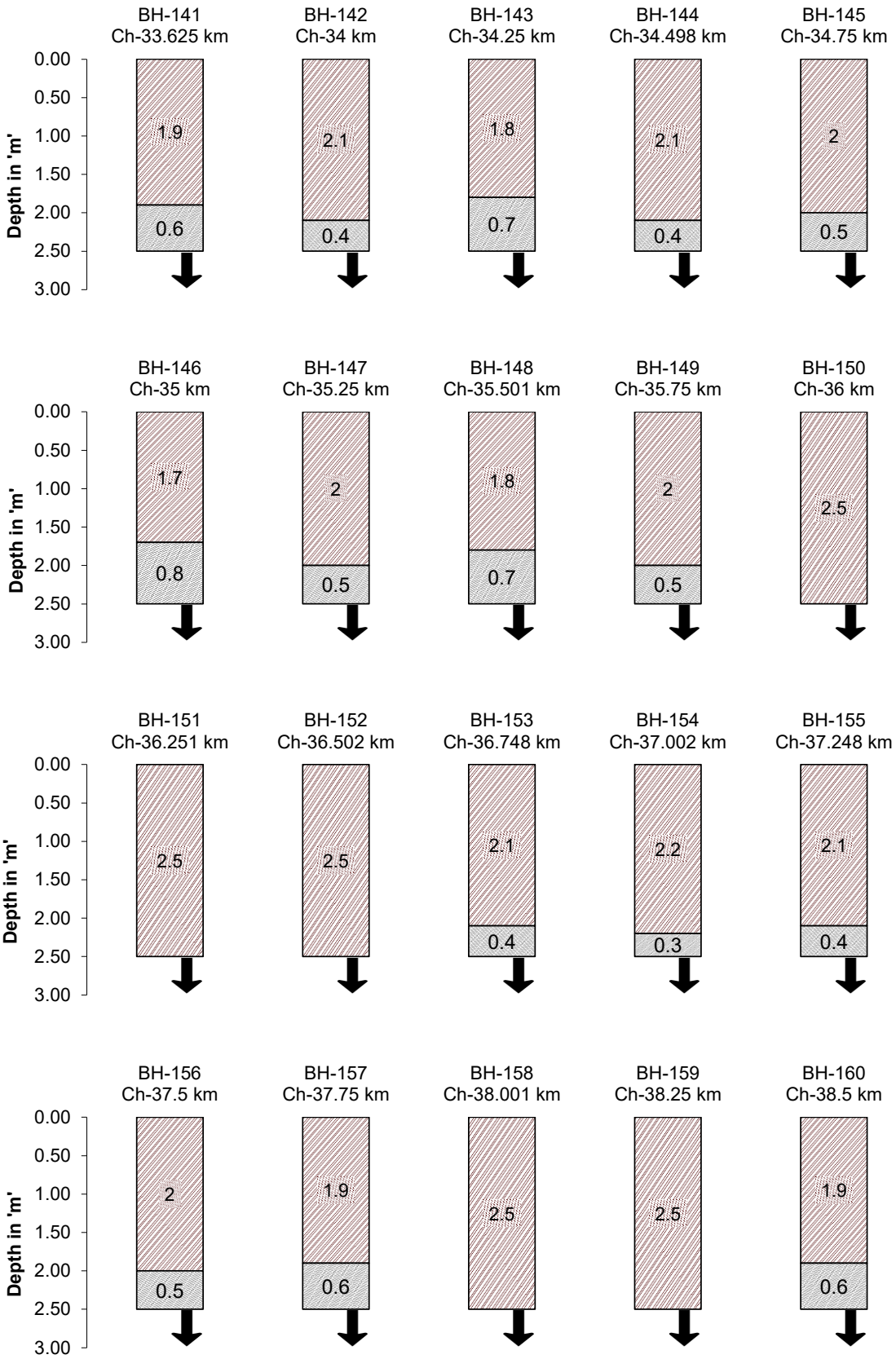

BH-41
Ch-9.5 km
BH-42
Ch-9.75 km
BH-43
Ch-10 km
BH-44
Ch-10.25 km
BH-45
Ch-10.499 km
BH-46
Ch-10.75 km
BH-47
Ch-11 km
BH-48
Ch-11.251 km
BH-49
Ch-11.5 km
BH-50
Ch-11.751 km
BH-51
Ch-11.999 km
BH-52
Ch-12.261 km
BH-53
Ch-12.507 km
BH-54
Ch-12.755 km
BH-55
Ch-13.01 km
BH-56
Ch-13.078 km
BH-57
Ch-13.126 km
BH-58
Ch-13.249 km
BH-59
Ch-13.513 km
BH-60
Ch-13.749 km
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00
2.5
1.4
1.1
1.2
1.3
1
1.5

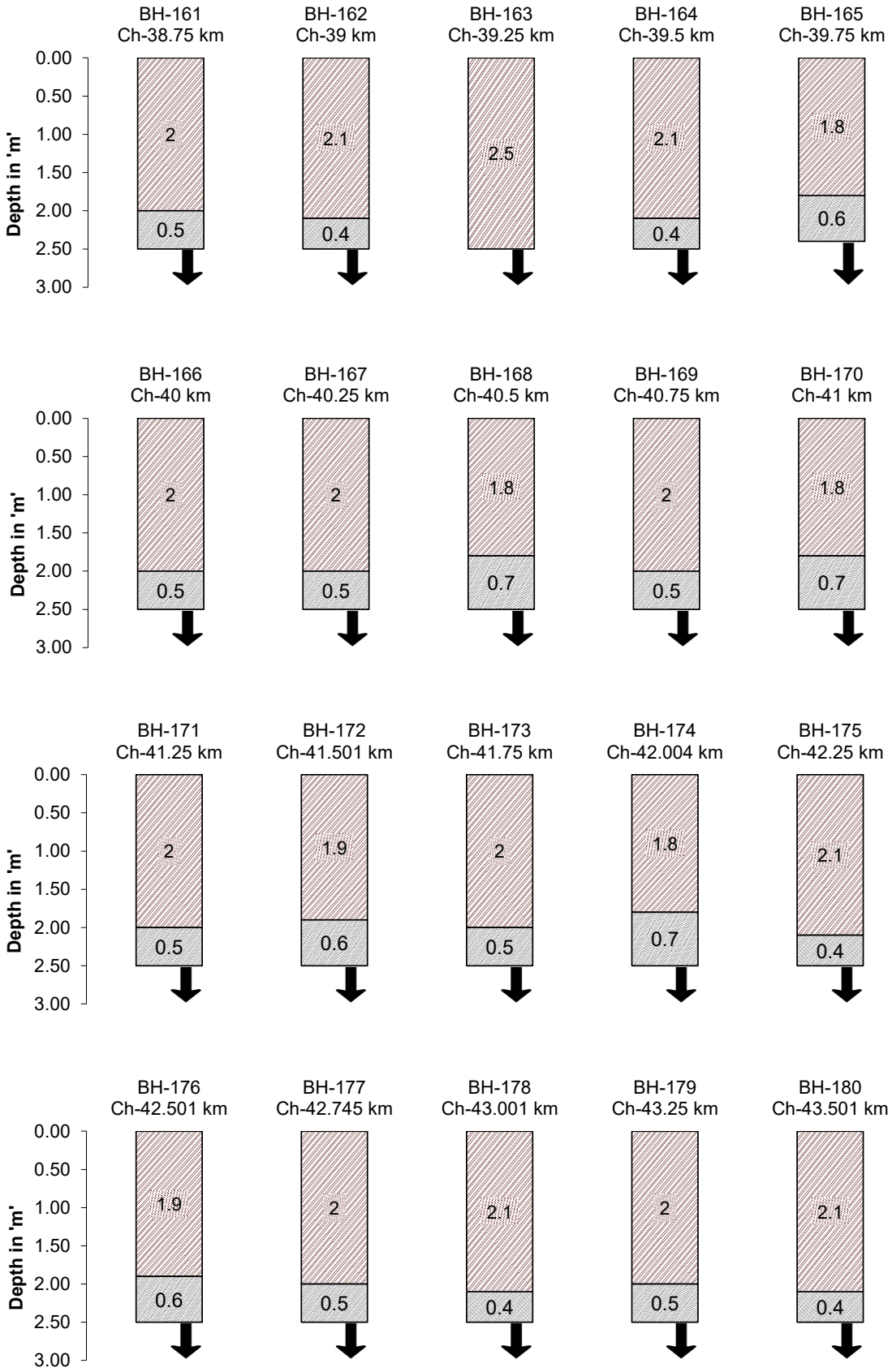

BH-61
Ch-14.005 km
BH-62
Ch-14.049 km
BH-63
Ch-14.203 km
BH-64
Ch-14.259 km
BH-65
Ch-14.379 km
BH-66
Ch-14.625 km
BH-67
Ch-14.75 km
BH-68
Ch-15.009 km
BH-69
Ch-15.124 km
BH-70
Ch-15.5 km
BH-71
Ch-15.589 km
BH-72
Ch-16.584 km
BH-73
Ch-16.749 km
BH-74
Ch-17 km
BH-75
Ch-17.25 km
BH-76
Ch-17.5 km
BH-77
Ch-17.754 km
BH-78
Ch-18.011 km
BH-79
Ch-18.25 km
BH-80
Ch-18.5 km
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00
2.5
1.4
1.1
1.5
1
1.6
0.9
1.9
0.6
2
0.5
2.1
0.4

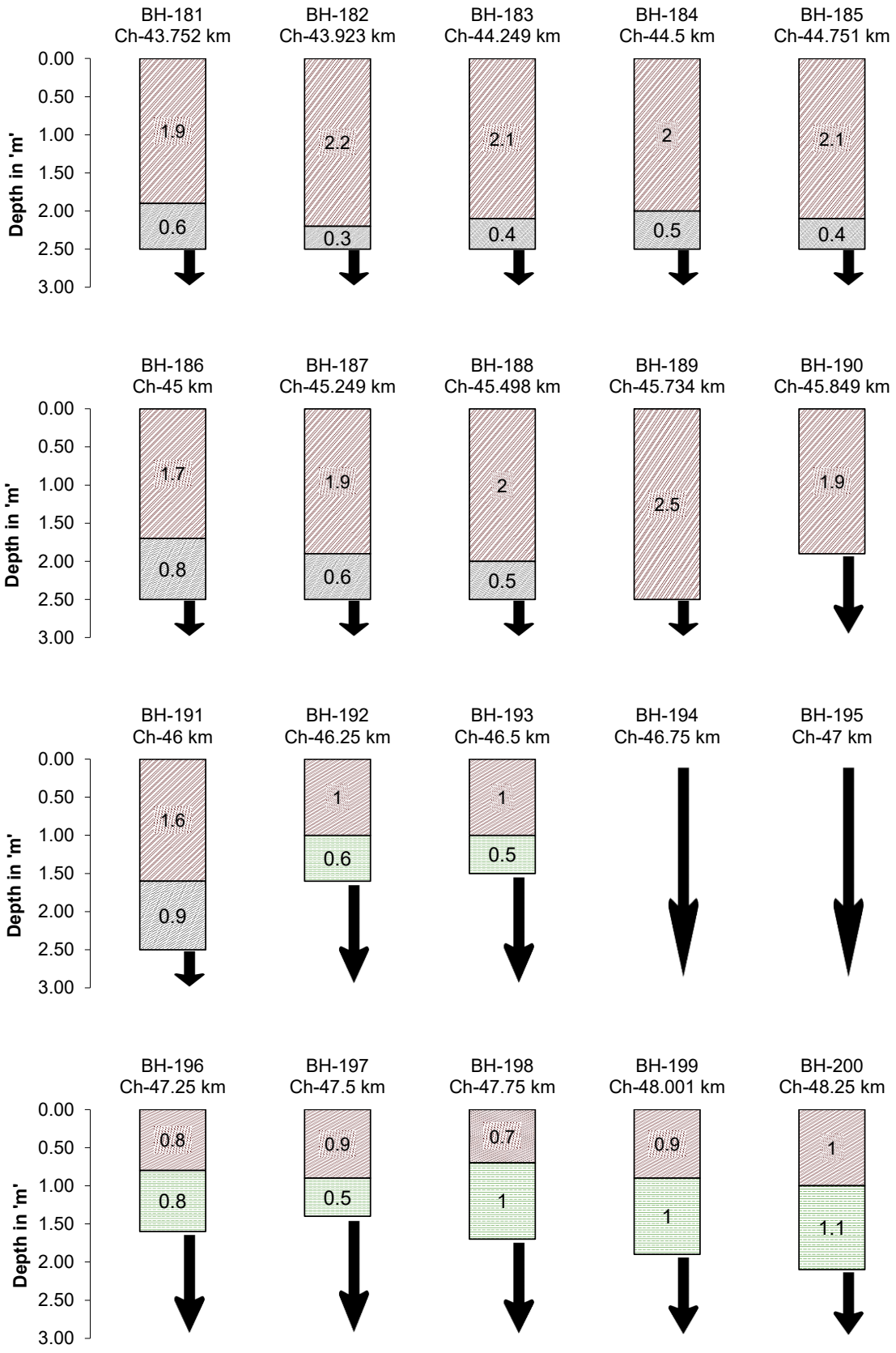

BH-81
Ch-18.751 km
2.2
0.3
BH-82
Ch-19 km
2.1
0.4
BH-83
Ch-19.251 km
2.2
0.3
BH-84
Ch-19.5 km
2.1
0.4
BH-85
Ch-19.749 km
2.2
0.3
BH-86
Ch-19.943 km
2.1
0.4
BH-87
Ch-20.251 km
1.8
0.7
BH-88
Ch-20.501 km
1.5
1
BH-89
Ch-20.75 km
1.6
0.9
BH-90
Ch-21 km
1.7
0.8
BH-91
Ch-21.25 km
2
0.5
BH-92
Ch-21.501 km
1.8
0.7
BH-93
Ch-21.751 km
1.9
0.6
BH-94
Ch-22.001 km
2.2
0.3
BH-95
Ch-22.252 km
1.4
1.1
BH-96
Ch-22.501 km
1.2
1.3
BH-97
Ch-22.751 km
1.8
0.7
BH-98
Ch-23.001 km
2
0.5
BH-99
Ch-23.251 km
1.8
0.7
BH-100
Ch-23.5 km
2.1
0.4
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00

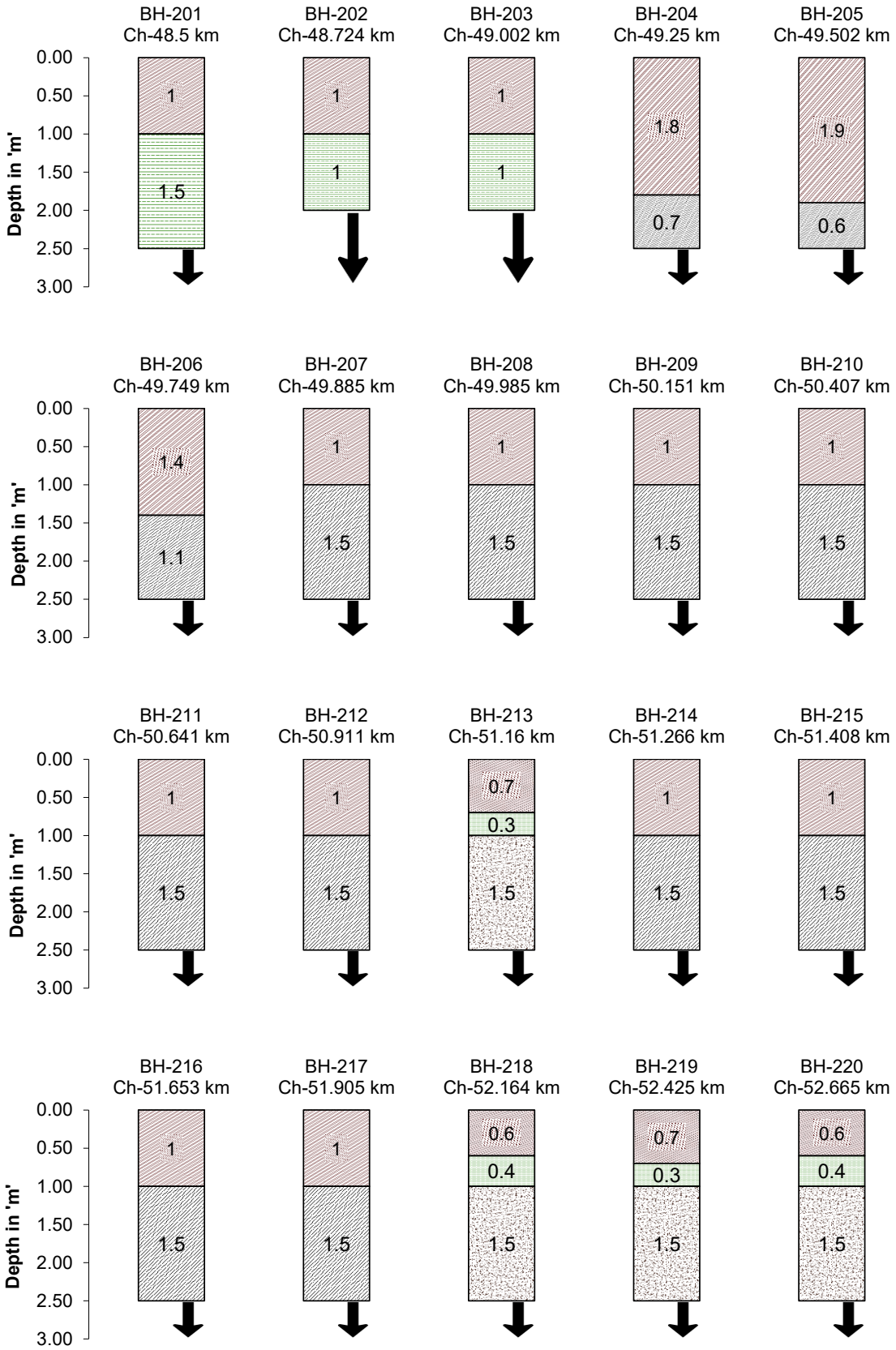

BH-101
Ch-23.751 km
2.5
BH-102
Ch-24.001 km
1.8
0.7
BH-103
Ch-24.25 km
2.5
BH-104
Ch-24.5 km
2.5
BH-105
Ch-24.75 km
2.5
BH-106
Ch-25.001 km
2.5
BH-107
Ch-25.251 km
2.5
BH-108
Ch-25.516 km
2.5
BH-109
Ch-25.75 km
2.5
BH-110
Ch-26 km
1.8
0.7
BH-111
Ch-26.25 km
1.6
0.9
BH-112
Ch-26.501 km
1.5
1
BH-113
Ch-26.751 km
1.8
0.7
BH-114
Ch-27.003 km
2
0.5
BH-115
Ch-27.251 km
2.1
0.4
BH-116
Ch-27.5 km
2
0.5
BH-117
Ch-27.751 km
2.1
0.4
BH-118
Ch-28.002 km
1.8
0.7
BH-119
Ch-28.25 km
1.6
0.9
BH-120
Ch-28.502 km
2
0.5
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00

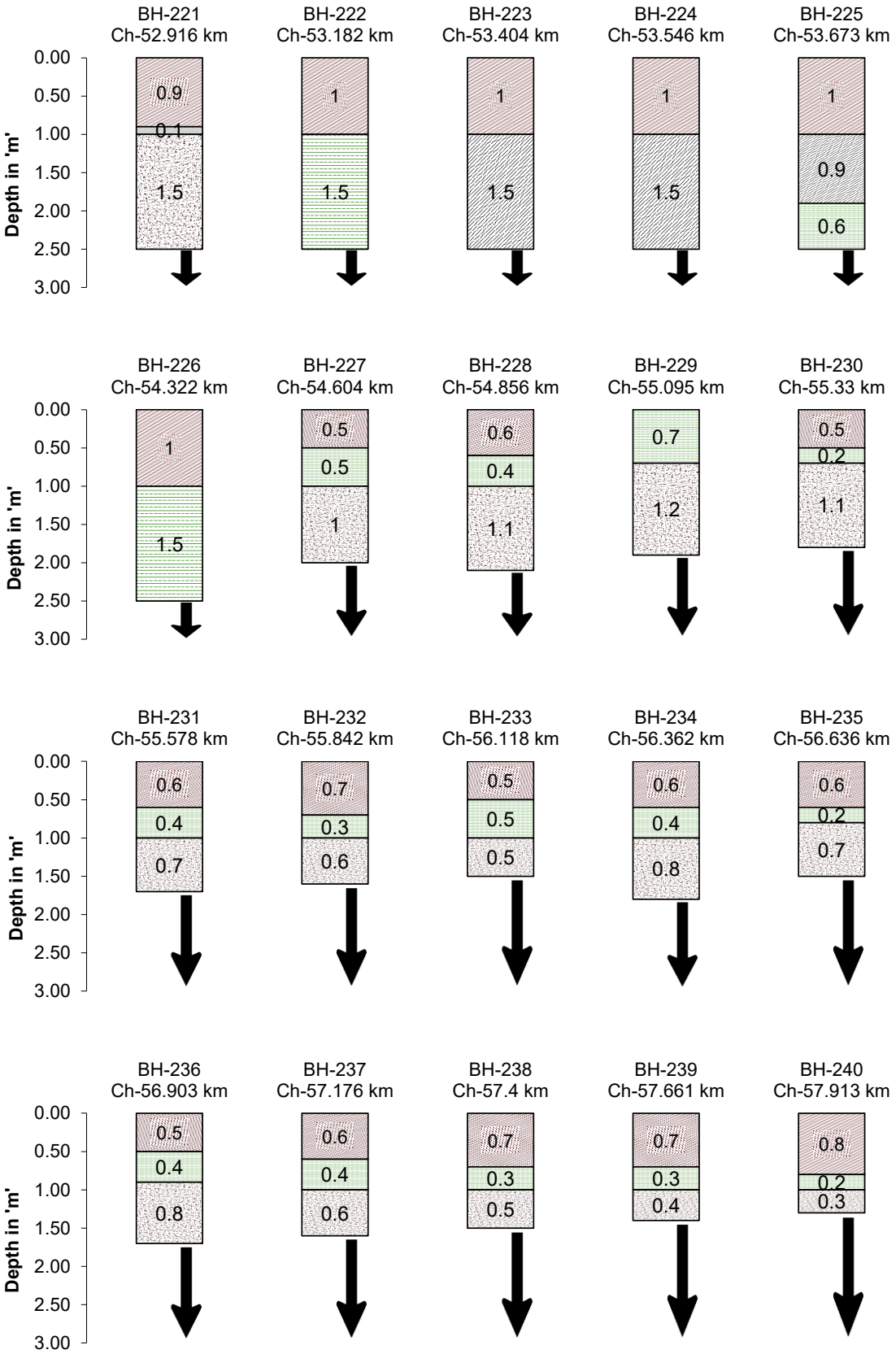

BH-121
Ch-28.752 km
1.5
1
BH-122
Ch-29.001 km
2
0.5
BH-123
Ch-29.251 km
1.8
0.7
BH-124
Ch-29.501 km
2
0.5
BH-125
Ch-29.753 km
2
0.5
BH-126
Ch-30.001 km
2.1
0.4
BH-127
Ch-30.251 km
2.5
BH-128
Ch-30.501 km
2.5
BH-129
Ch-30.75 km
2.5
BH-130
Ch-31 km
2.5
BH-131
Ch-31.125 km
2.5
BH-132
Ch-31.5 km
2.5
BH-133
Ch-31.751 km
2.5
BH-134
Ch-32.084 km
0.8
1.7
BH-135
Ch-32.25 km
2
0.5
BH-136
Ch-32.499 km
1.8
0.7
BH-137
Ch-32.75 km
2.1
0.4
BH-138
Ch-32.999 km
2.1
0.4
BH-139
Ch-33.249 km
1.8
0.7
BH-140
Ch-33.5 km
2
0.5
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00


BH-141
Ch-33.625 km
1.9
0.6
BH-142
Ch-34 km
2.1
0.4
BH-143
Ch-34.25 km
1.8
0.7
BH-144
Ch-34.498 km
2.1
0.4
BH-145
Ch-34.75 km
2
0.5
BH-146
Ch-35 km
1.7
0.8
BH-147
Ch-35.25 km
2
0.5
BH-148
Ch-35.501 km
1.8
0.7
BH-149
Ch-35.75 km
2
0.5
BH-150
Ch-36 km
2.5
BH-151
Ch-36.251 km
2.5
BH-152
Ch-36.502 km
2.5
BH-153
Ch-36.748 km
2.1
0.4
BH-154
Ch-37.002 km
2.2
0.3
BH-155
Ch-37.248 km
2.1
0.4
BH-156
Ch-37.5 km
2
0.5
BH-157
Ch-37.75 km
1.9
0.6
BH-158
Ch-38.001 km
2.5
BH-159
Ch-38.25 km
2.5
BH-160
Ch-38.5 km
1.9
0.6
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00


BH-161
Ch-38.75 km
BH-162
Ch-39 km
BH-163
Ch-39.25 km
BH-164
Ch-39.5 km
BH-165
Ch-39.75 km
BH-166
Ch-40 km
BH-167
Ch-40.25 km
BH-168
Ch-40.5 km
BH-169
Ch-40.75 km
BH-170
Ch-41 km
BH-171
Ch-41.25 km
BH-172
Ch-41.501 km
BH-173
Ch-41.75 km
BH-174
Ch-42.004 km
BH-175
Ch-42.25 km
BH-176
Ch-42.501 km
BH-177
Ch-42.745 km
BH-178
Ch-43.001 km
BH-179
Ch-43.25 km
BH-180
Ch-43.501 km
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00
2
0.5
2.1
0.4
2.5
0.4
1.8
0.6
2
0.5
2
0.5
1.8
0.7
2
0.5
1.8
0.7
2
0.5
1.9
0.6
2
0.5
1.8
0.7
2.1
0.4
1.9
0.6
2
0.5
2.1
0.4
2
0.5
2.1
0.4


BH-181
Ch-43.752 km
1.9
0.6
BH-182
Ch-43.923 km
2.2
0.3
BH-183
Ch-44.249 km
2.1
0.4
BH-184
Ch-44.5 km
2
0.5
BH-185
Ch-44.751 km
2.1
0.4
BH-186
Ch-45 km
1.7
0.8
BH-187
Ch-45.249 km
1.9
0.6
BH-188
Ch-45.498 km
2
0.5
BH-189
Ch-45.734 km
2.5
BH-190
Ch-45.849 km
1.9
BH-191
Ch-46 km
1.6
0.9
BH-192
Ch-46.25 km
1
0.6
BH-193
Ch-46.5 km
1
0.5
BH-194
Ch-46.75 km
BH-195
Ch-47 km
BH-196
Ch-47.25 km
0.8
0.8
BH-197
Ch-47.5 km
0.9
0.5
BH-198
Ch-47.75 km
0.7
1
BH-199
Ch-48.001 km
0.9
1
BH-200
Ch-48.25 km
1
1.1
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00


BH-201
Ch-48.5 km
1
1.5
BH-202
Ch-48.724 km
1
1
BH-203
Ch-49.002 km
1
1
BH-204
Ch-49.25 km
1.8
0.7
BH-205
Ch-49.502 km
1.9
0.6
BH-206
Ch-49.749 km
1.4
1.1
BH-207
Ch-49.885 km
1
1.5
BH-208
Ch-49.985 km
1
1.5
BH-209
Ch-50.151 km
1
1.5
BH-210
Ch-50.407 km
1
1.5
BH-211
Ch-50.641 km
1
1.5
BH-212
Ch-50.911 km
1
1.5
BH-213
Ch-51.16 km
0.7
0.3
1.5
BH-214
Ch-51.266 km
1
1.5
BH-215
Ch-51.408 km
1
1.5
BH-216
Ch-51.653 km
1
1.5
BH-217
Ch-51.905 km
1
1.5
BH-218
Ch-52.164 km
0.6
0.4
1.5
BH-219
Ch-52.425 km
0.7
0.3
1.5
BH-220
Ch-52.665 km
0.6
0.4
1.5
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00


BH-221
Ch-52.916 km
0.9
0.1
1.5
BH-222
Ch-53.182 km
1
1.5
BH-223
Ch-53.404 km
1
1.5
BH-224
Ch-53.546 km
1
1.5
BH-225
Ch-53.673 km
1
0.9
0.6
BH-226
Ch-54.322 km
1
1.5
BH-227
Ch-54.604 km
0.5
0.5
1
BH-228
Ch-54.856 km
0.6
0.4
1.1
BH-229
Ch-55.095 km
0.7
1.2
BH-230
Ch-55.33 km
0.5
0.2
1.1
BH-231
Ch-55.578 km
0.6
0.4
0.7
BH-232
Ch-55.842 km
0.7
0.3
0.6
BH-233
Ch-56.118 km
0.5
0.5
0.5
BH-234
Ch-56.362 km
0.6
0.4
0.8
BH-235
Ch-56.636 km
0.6
0.2
0.7
BH-236
Ch-56.903 km
0.5
0.4
0.8
BH-237
Ch-57.176 km
0.6
0.4
0.6
BH-238
Ch-57.4 km
0.7
0.3
0.5
BH-239
Ch-57.661 km
0.7
0.3
0.4
BH-240
Ch-57.913 km
0.8
0.2
0.3
Depth in 'm'
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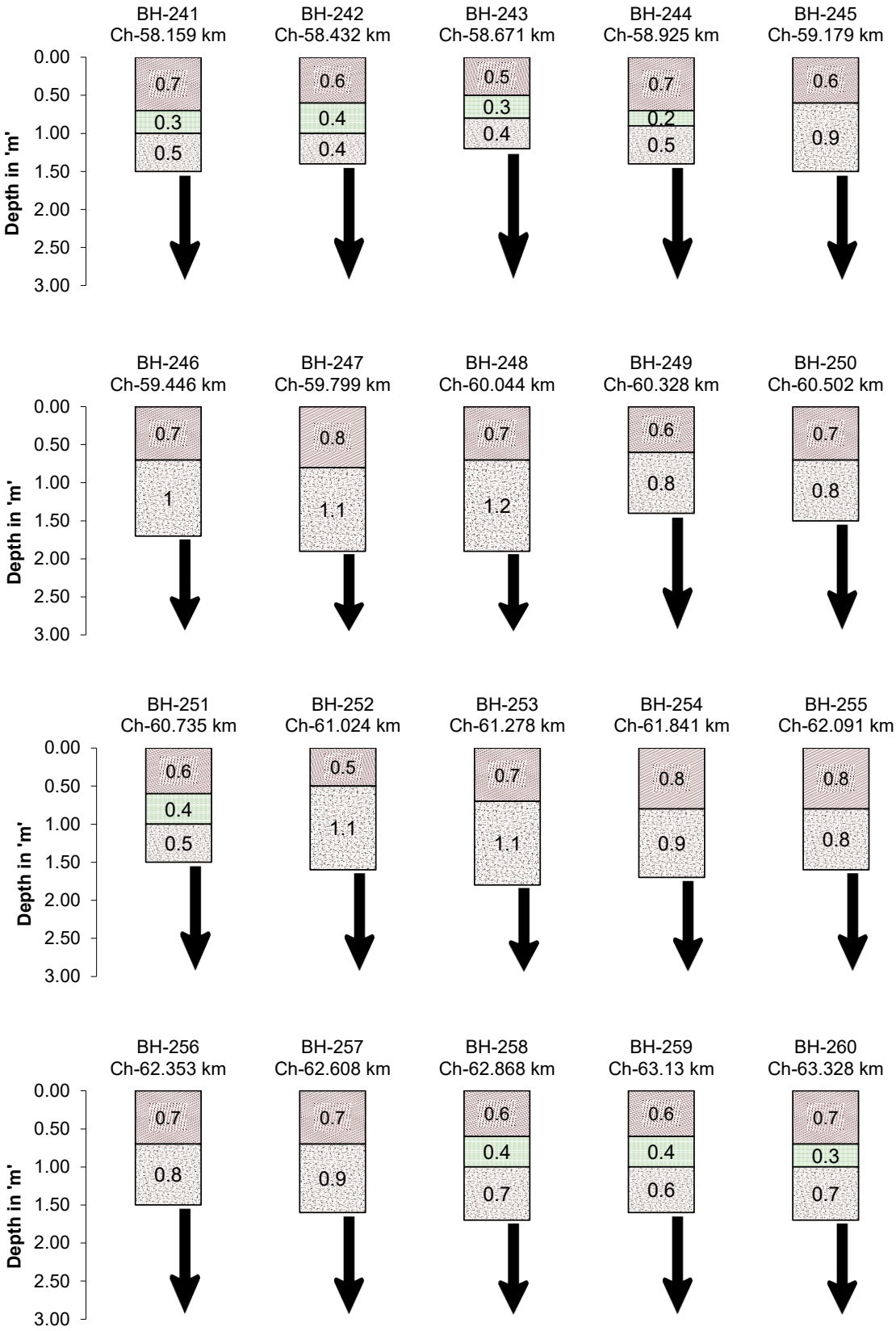
0.50
1.00
1.50
2.00
2.50
3.00


BH-241
Ch-58.159 km
0.7
0.3
0.5
BH-242
Ch-58.432 km
0.6
0.4
0.4
BH-243
Ch-58.671 km
0.5
0.3
0.4
BH-244
Ch-58.925 km
0.7
0.2
0.5
BH-245
Ch-59.179 km
0.6
0.9
BH-246
Ch-59.446 km
0.7
1
BH-247
Ch-59.799 km
0.8
1.1
BH-248
Ch-60.044 km
0.7
1.2
BH-249
Ch-60.328 km
0.6
0.8
BH-250
Ch-60.502 km
0.7
0.8
BH-251
Ch-60.735 km
0.6
0.4
0.5
BH-252
Ch-61.024 km
0.5
1.1
BH-253
Ch-61.278 km
0.7
1.1
BH-254
Ch-61.841 km
0.8
0.9
BH-255
Ch-62.091 km
0.8
0.8
BH-256
Ch-62.353 km
0.7
0.8
BH-257
Ch-62.608 km
0.7
0.9
BH-258
Ch-62.868 km
0.6
0.4
0.7
BH-259
Ch-63.13 km
0.6
0.4
0.6
BH-260
Ch-63.328 km
0.7
0.3
0.7
Depth in 'm'
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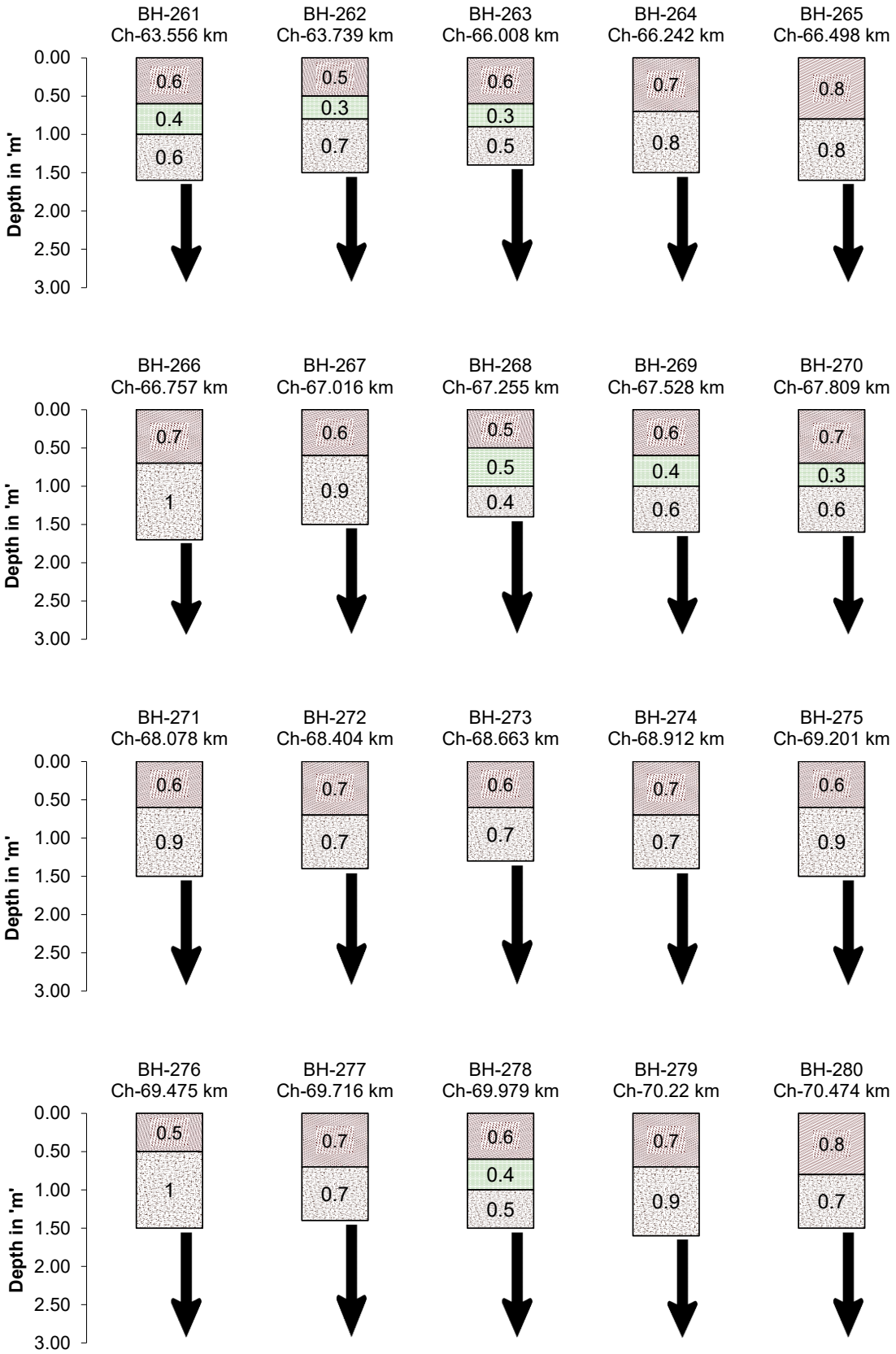
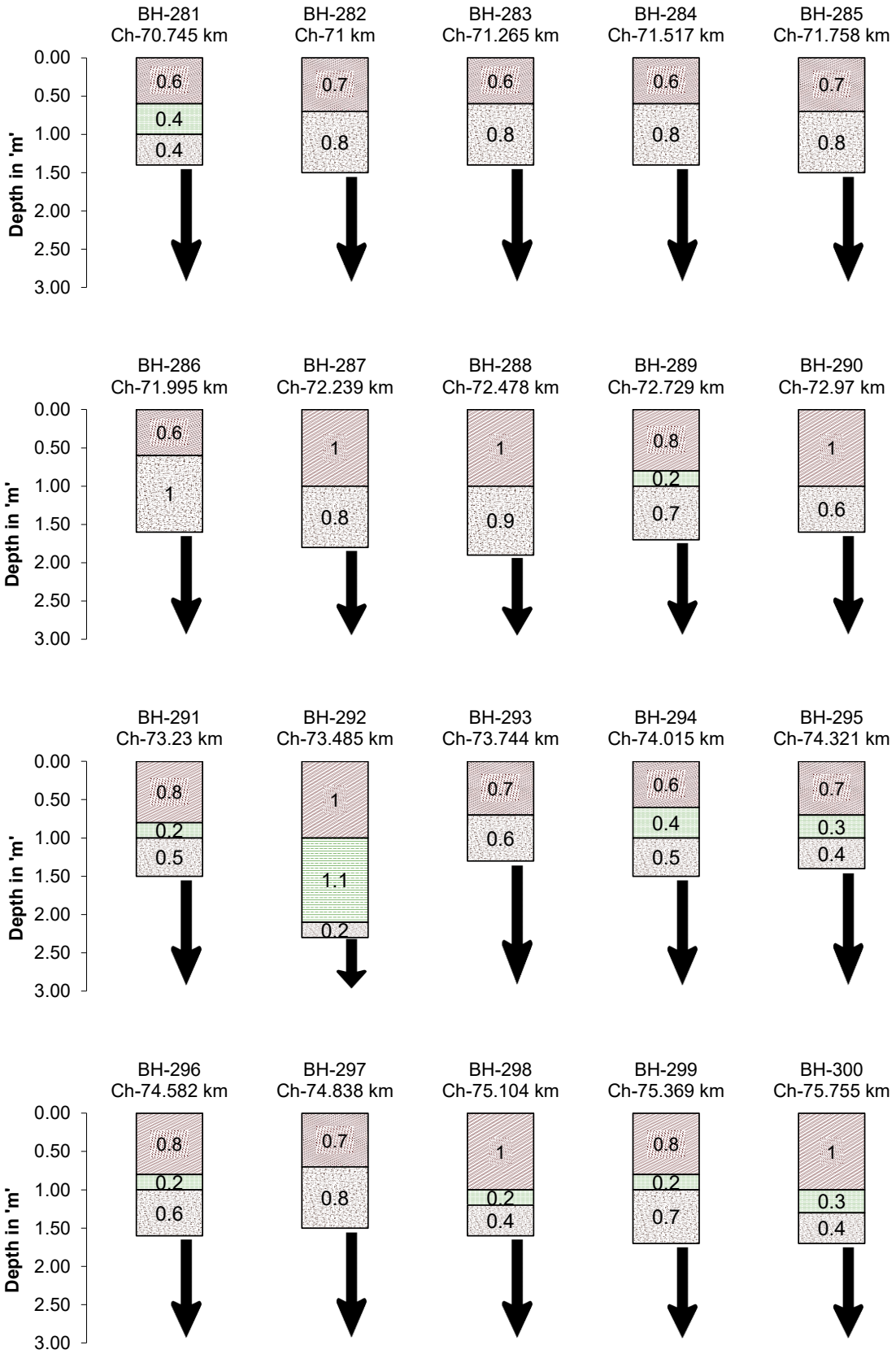
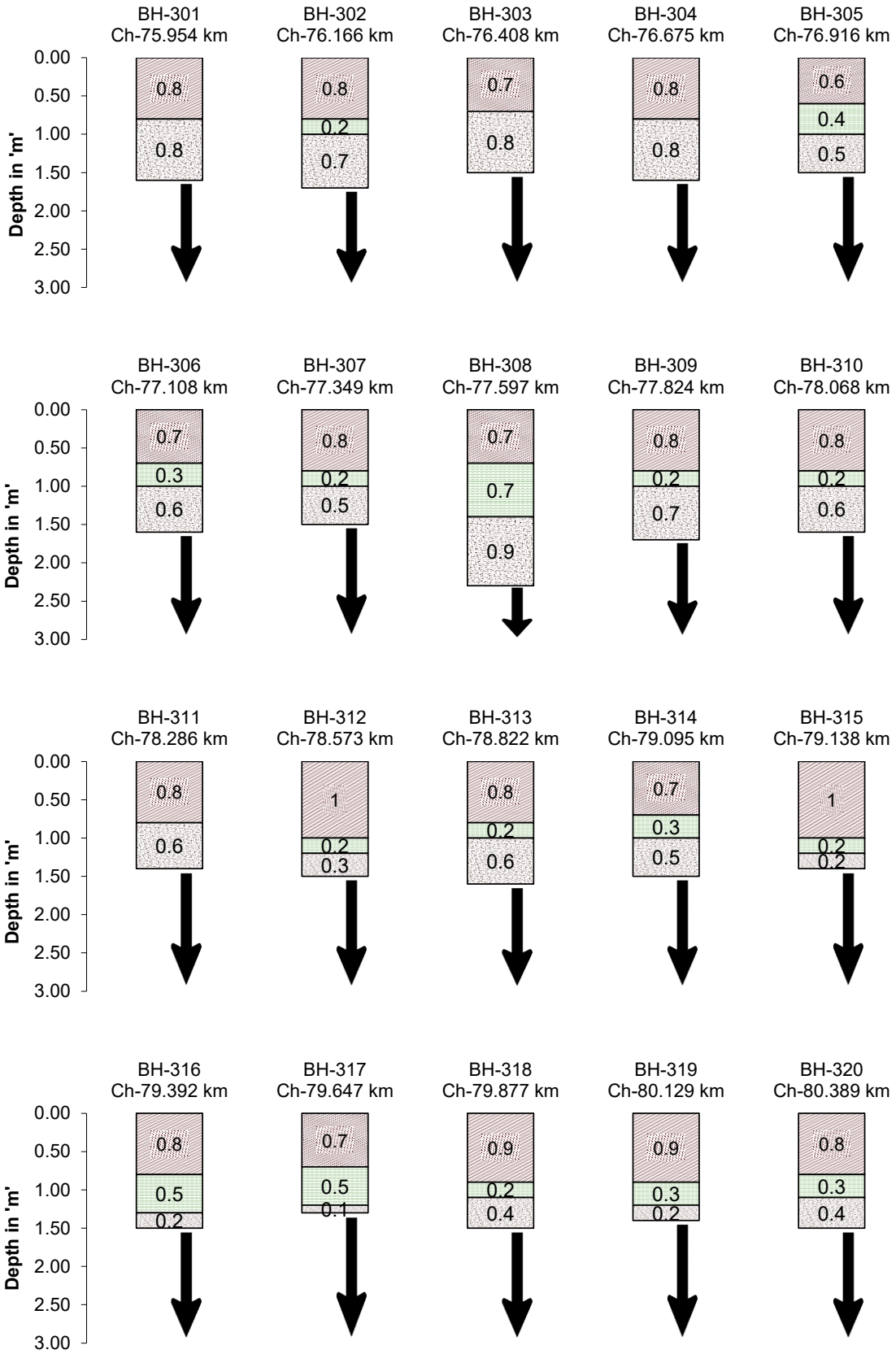
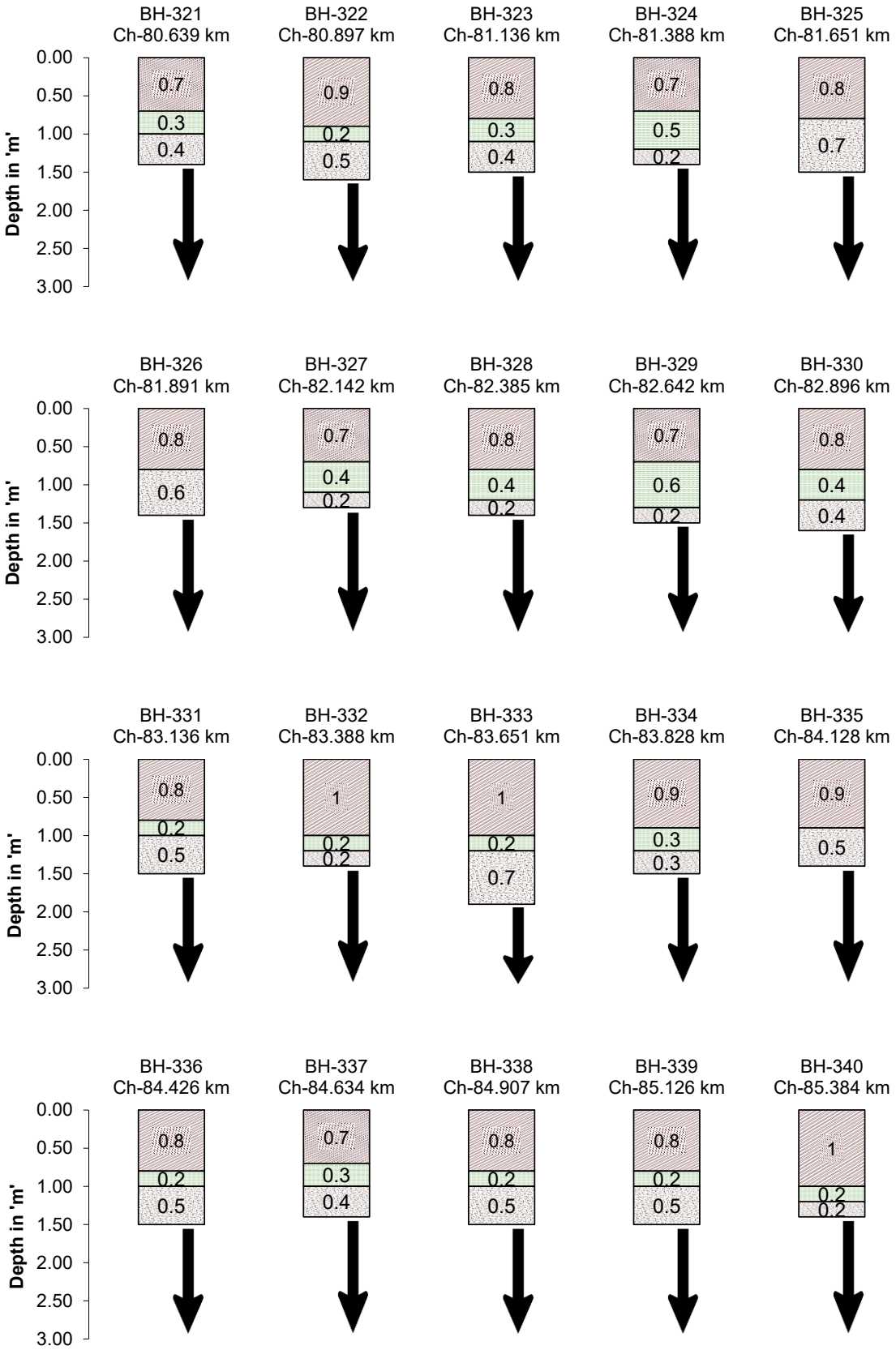
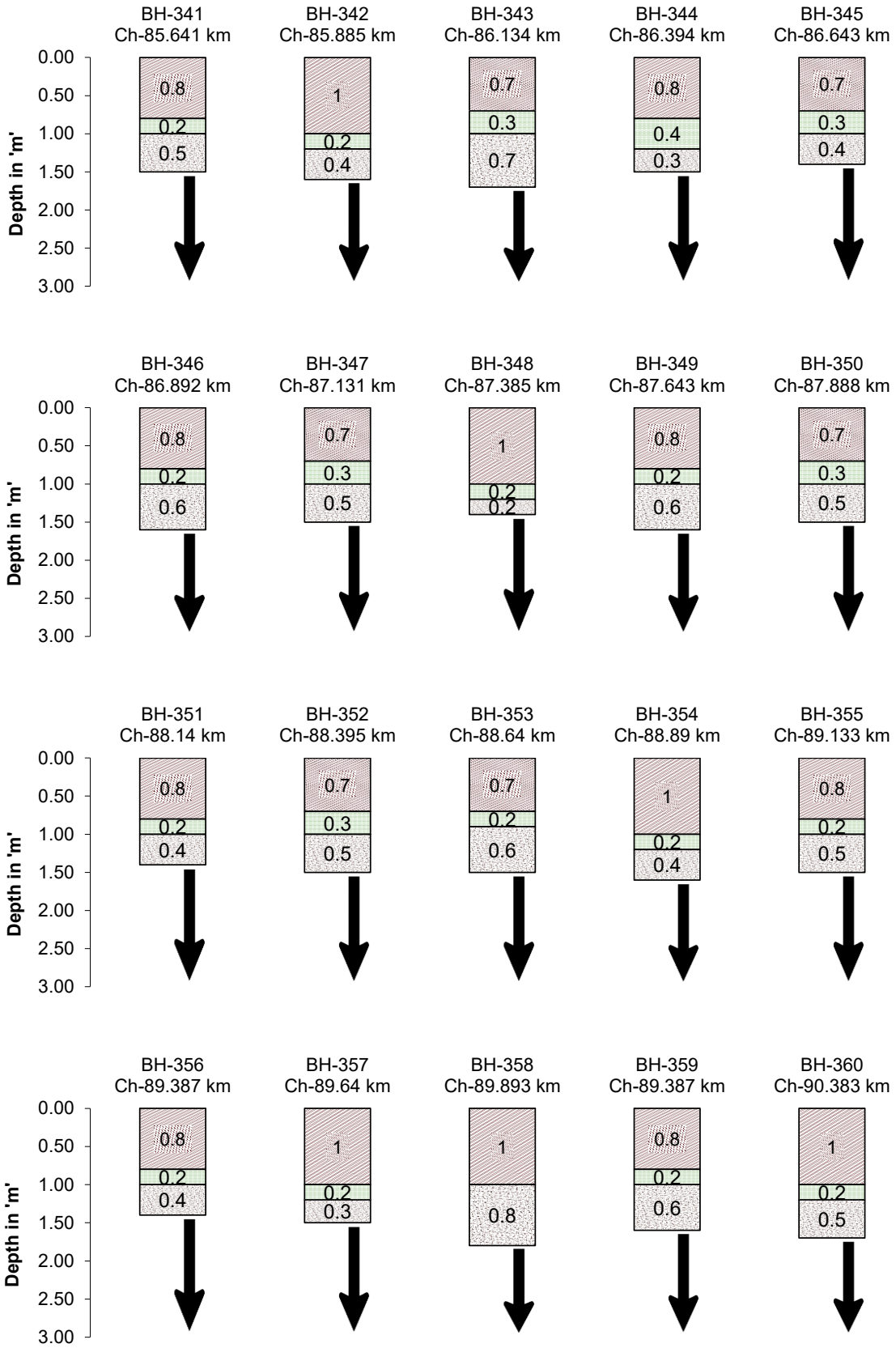
0.50
1.00
1.50
2.00
2.50
3.00

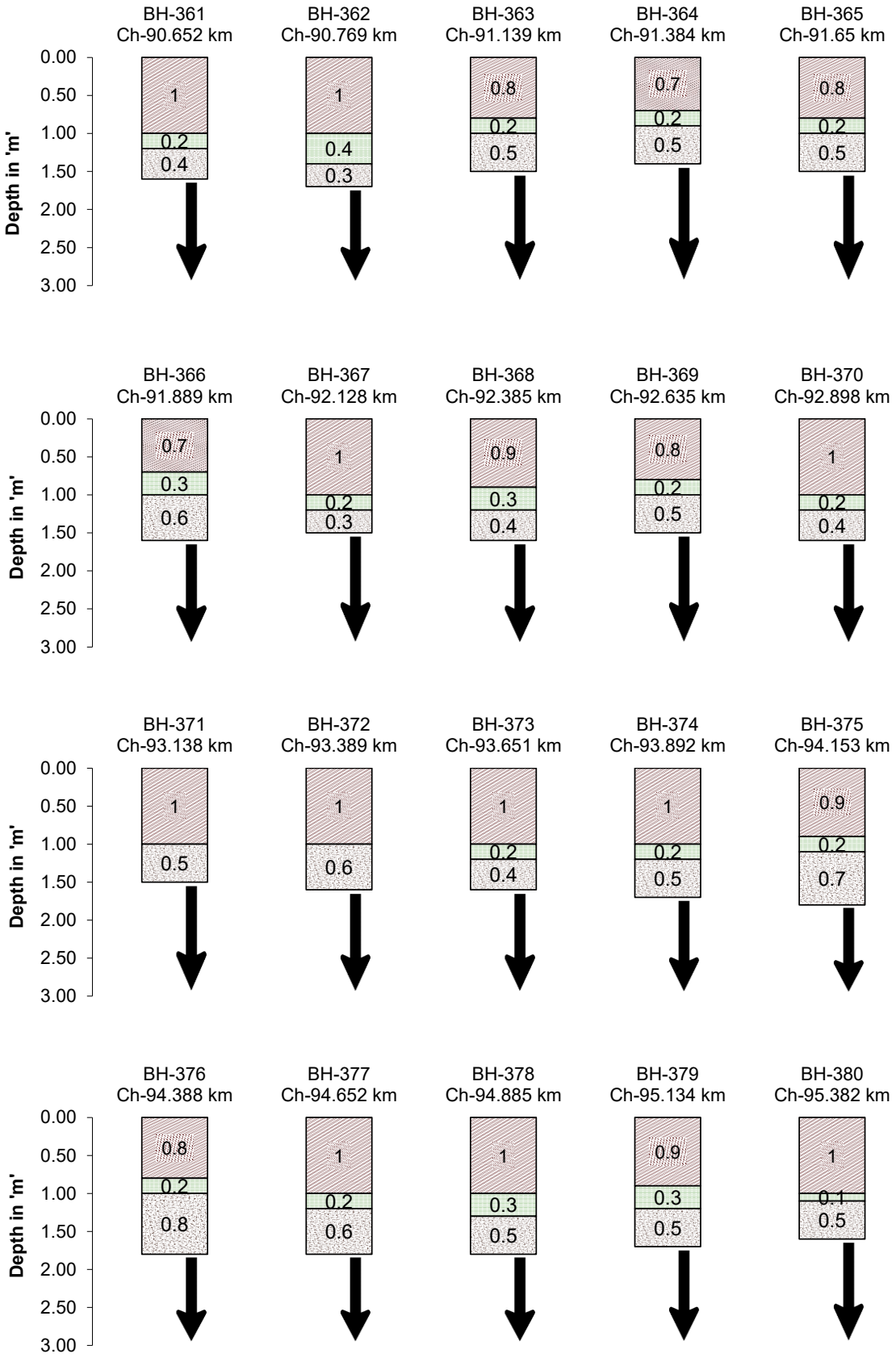

BH-261
Ch-63.556 km
0.6
0.4
0.6
BH-262
Ch-63.739 km
0.5
0.3
0.7
BH-263
Ch-66.008 km
0.6
0.3
0.5
BH-264
Ch-66.242 km
0.7
0.8
BH-265
Ch-66.498 km
0.8
0.8
BH-266
Ch-66.757 km
0.7
1
BH-267
Ch-67.016 km
0.6
0.9
BH-268
Ch-67.255 km
0.5
0.5
0.4
BH-269
Ch-67.528 km
0.6
0.4
0.6
BH-270
Ch-67.809 km
0.7
0.3
0.6
BH-271
Ch-68.078 km
0.6
0.9
BH-272
Ch-68.404 km
0.7
0.7
BH-273
Ch-68.663 km
0.6
0.7
BH-274
Ch-68.912 km
0.7
0.7
BH-275
Ch-69.201 km
0.6
0.9
BH-276
Ch-69.475 km
0.5
1
BH-277
Ch-69.716 km
0.7
0.7
BH-278
Ch-69.979 km
0.6
0.4
0.5
BH-279
Ch-70.22 km
0.7
0.9
BH-280
Ch-70.474 km
0.8
0.7
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00


BH-281
Ch-70.745 km
0.6
0.4
0.4
BH-282
Ch-71 km
0.7
0.8
BH-283
Ch-71.265 km
0.6
0.8
BH-284
Ch-71.517 km
0.6
0.8
BH-285
Ch-71.758 km
0.7
0.8
BH-286
Ch-71.995 km
0.6
1
BH-287
Ch-72.239 km
1
0.8
BH-288
Ch-72.478 km
1
0.9
BH-289
Ch-72.729 km
0.8
0.2
0.7
BH-290
Ch-72.97 km
1
0.6
BH-291
Ch-73.23 km
0.8
0.2
0.5
BH-292
Ch-73.485 km
1
1.1
0.2
BH-293
Ch-73.744 km
0.7
0.6
BH-294
Ch-74.015 km
0.6
0.4
0.5
BH-295
Ch-74.321 km
0.7
0.3
0.4
BH-296
Ch-74.582 km
0.8
0.2
0.6
BH-297
Ch-74.838 km
0.7
0.8
BH-298
Ch-75.104 km
1
0.2
0.4
BH-299
Ch-75.369 km
0.8
0.2
0.7
BH-300
Ch-75.755 km
1
0.3
0.4
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00


BH-301
Ch-75.954 km
0.8
0.8
BH-302
Ch-76.166 km
0.8
0.2
0.7
BH-303
Ch-76.408 km
0.7
0.8
BH-304
Ch-76.675 km
0.8
0.8
BH-305
Ch-76.916 km
0.6
0.4
0.5
BH-306
Ch-77.108 km
0.7
0.3
0.6
BH-307
Ch-77.349 km
0.8
0.2
0.5
BH-308
Ch-77.597 km
0.7
0.7
0.9
BH-309
Ch-77.824 km
0.8
0.2
0.7
BH-310
Ch-78.068 km
0.8
0.2
0.6
BH-311
Ch-78.286 km
0.8
0.6
BH-312
Ch-78.573 km
1
0.2
0.3
BH-313
Ch-78.822 km
0.8
0.2
0.6
BH-314
Ch-79.095 km
0.7
0.3
0.5
BH-315
Ch-79.138 km
1
0.2
0.2
BH-316
Ch-79.392 km
0.8
0.5
0.2
BH-317
Ch-79.647 km
0.7
0.5
0.1
BH-318
Ch-79.877 km
0.9
0.2
0.4
BH-319
Ch-80.129 km
0.9
0.3
0.2
BH-320
Ch-80.389 km
0.8
0.3
0.4
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00


BH-321
Ch-80.639 km
0.7
0.3
0.4
BH-322
Ch-80.897 km
0.9
0.2
0.5
BH-323
Ch-81.136 km
0.8
0.3
0.4
BH-324
Ch-81.388 km
0.7
0.5
0.2
BH-325
Ch-81.651 km
0.8
0.7
BH-326
Ch-81.891 km
0.8
0.6
BH-327
Ch-82.142 km
0.7
0.4
0.2
BH-328
Ch-82.385 km
0.8
0.4
0.2
BH-329
Ch-82.642 km
0.7
0.6
0.2
BH-330
Ch-82.896 km
0.8
0.4
0.4
BH-331
Ch-83.136 km
0.8
0.2
0.5
BH-332
Ch-83.388 km
1
0.2
0.2
BH-333
Ch-83.651 km
1
0.2
0.7
BH-334
Ch-83.828 km
0.9
0.3
0.3
BH-335
Ch-84.128 km
0.9
0.5
BH-336
Ch-84.426 km
0.8
0.2
0.5
BH-337
Ch-84.634 km
0.7
0.3
0.4
BH-338
Ch-84.907 km
0.8
0.2
0.5
BH-339
Ch-85.126 km
0.8
0.2
0.5
BH-340
Ch-85.384 km
1
0.2
0.2
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00


BH-341
Ch-85.641 km
0.8
0.2
0.5
BH-342
Ch-85.885 km
1
0.2
0.4
BH-343
Ch-86.134 km
0.7
0.3
0.7
BH-344
Ch-86.394 km
0.8
0.4
0.3
BH-345
Ch-86.643 km
0.7
0.3
0.4
BH-346
Ch-86.892 km
0.8
0.2
0.6
BH-347
Ch-87.131 km
0.7
0.3
0.5
BH-348
Ch-87.385 km
1
0.2
0.2
BH-349
Ch-87.643 km
0.8
0.2
0.6
BH-350
Ch-87.888 km
0.7
0.3
0.5
BH-351
Ch-88.14 km
0.8
0.2
0.4
BH-352
Ch-88.395 km
0.7
0.3
0.5
BH-353
Ch-88.64 km
0.7
0.2
0.6
BH-354
Ch-88.89 km
1
0.2
0.4
BH-355
Ch-89.133 km
0.8
0.2
0.5
BH-356
Ch-89.387 km
0.8
0.2
0.4
BH-357
Ch-89.64 km
1
0.2
0.3
BH-358
Ch-89.893 km
1
0.8
BH-359
Ch-89.387 km
0.8
0.2
0.6
BH-360
Ch-90.383 km
1
0.2
0.5
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00


BH-361
Ch-90.652 km
1
0.2
0.4
BH-362
Ch-90.769 km
1
0.4
0.3
BH-363
Ch-91.139 km
0.8
0.2
0.5
BH-364
Ch-91.384 km
0.7
0.2
0.5
BH-365
Ch-91.65 km
0.8
0.2
0.5
BH-366
Ch-91.889 km
0.7
0.3
0.6
BH-367
Ch-92.128 km
1
0.2
0.3
BH-368
Ch-92.385 km
0.9
0.3
0.4
BH-369
Ch-92.635 km
0.8
0.2
0.5
BH-370
Ch-92.898 km
1
0.2
0.4
BH-371
Ch-93.138 km
1
0.5
BH-372
Ch-93.389 km
1
0.6
BH-373
Ch-93.651 km
1
0.2
0.4
BH-374
Ch-93.892 km
1
0.2
0.5
BH-375
Ch-94.153 km
0.9
0.2
0.7
BH-376
Ch-94.388 km
0.8
0.2
0.8
BH-377
Ch-94.652 km
1
0.2
0.6
BH-378
Ch-94.885 km
1
0.3
0.5
BH-379
Ch-95.134 km
0.9
0.3
0.5
BH-380
Ch-95.382 km
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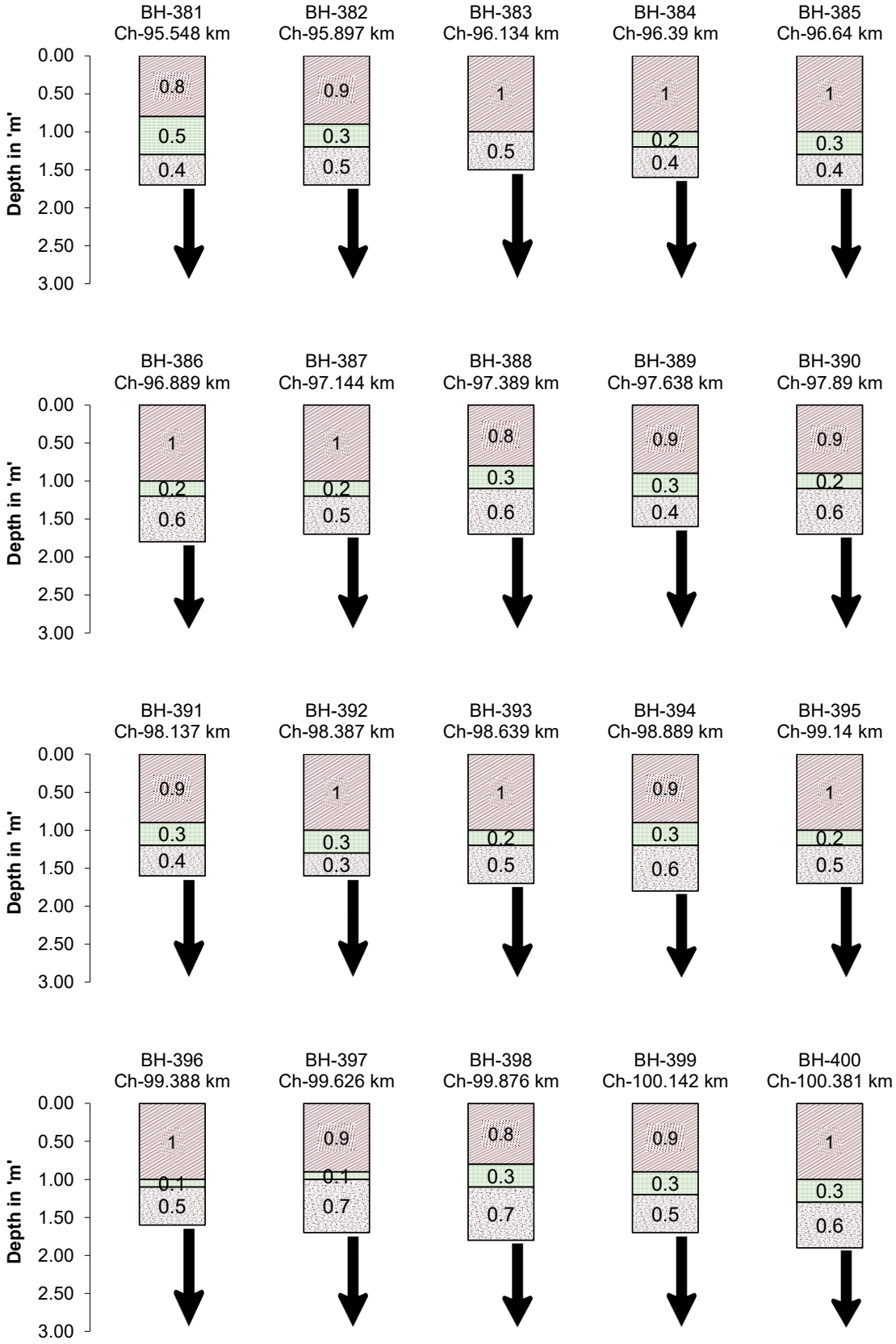
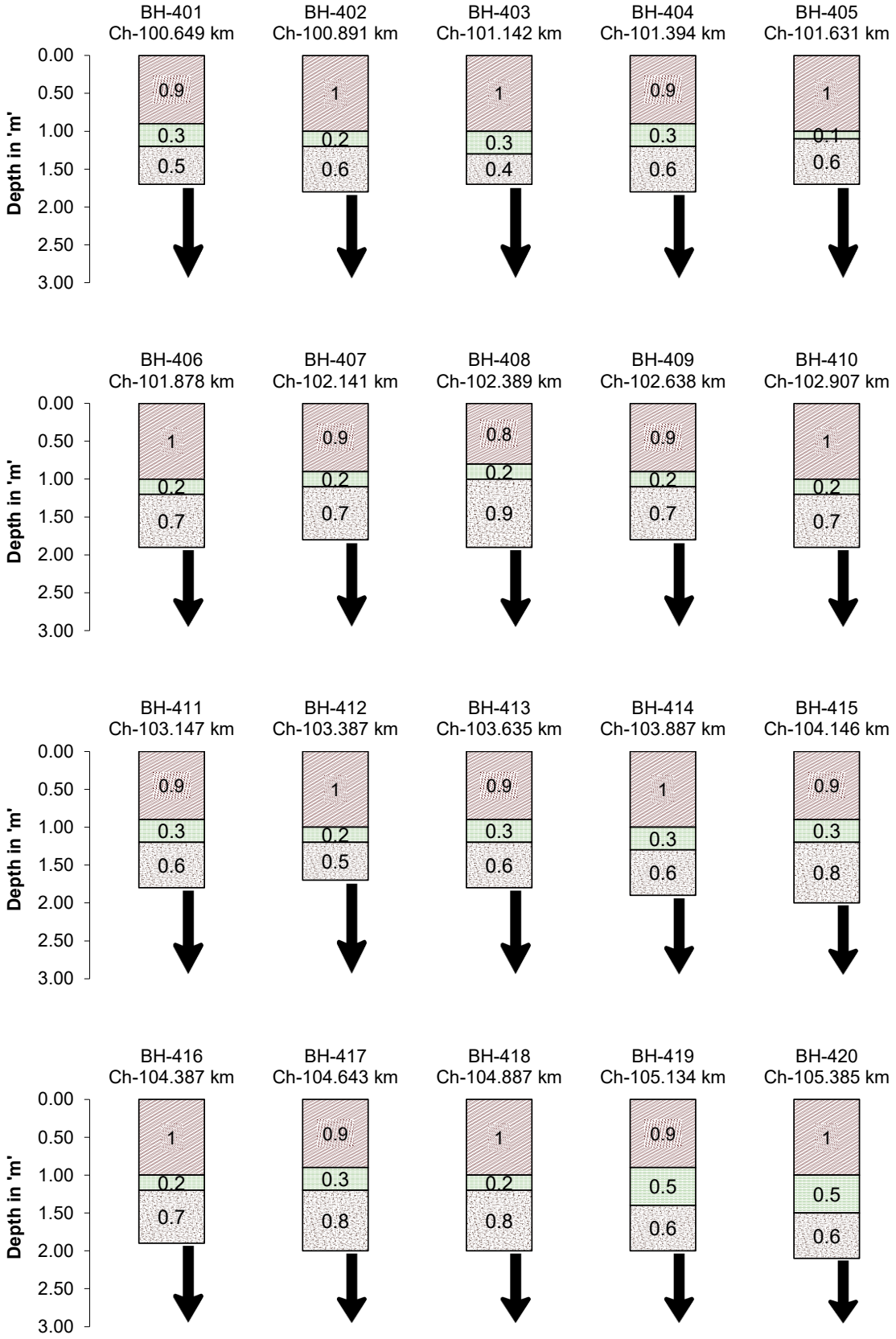
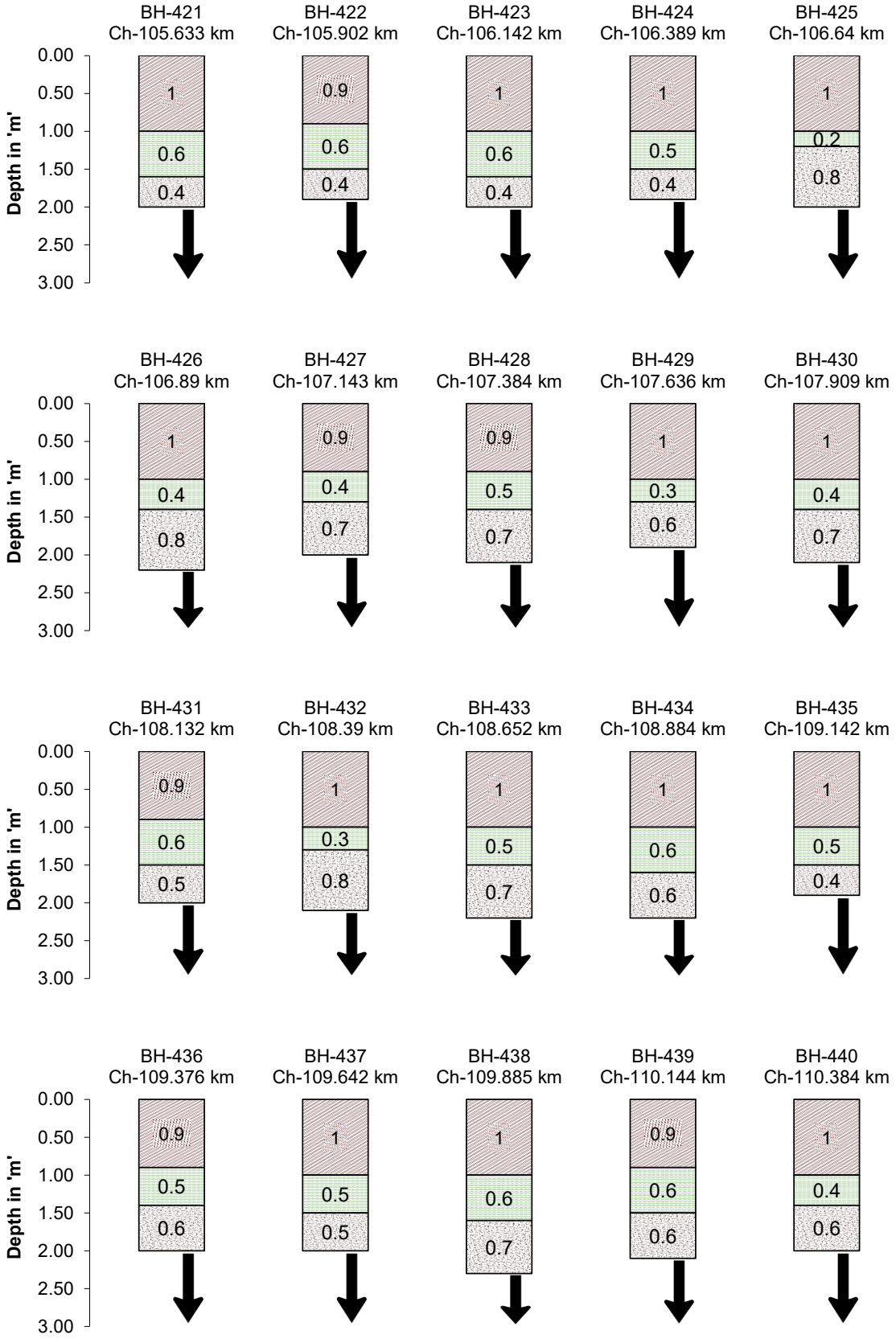
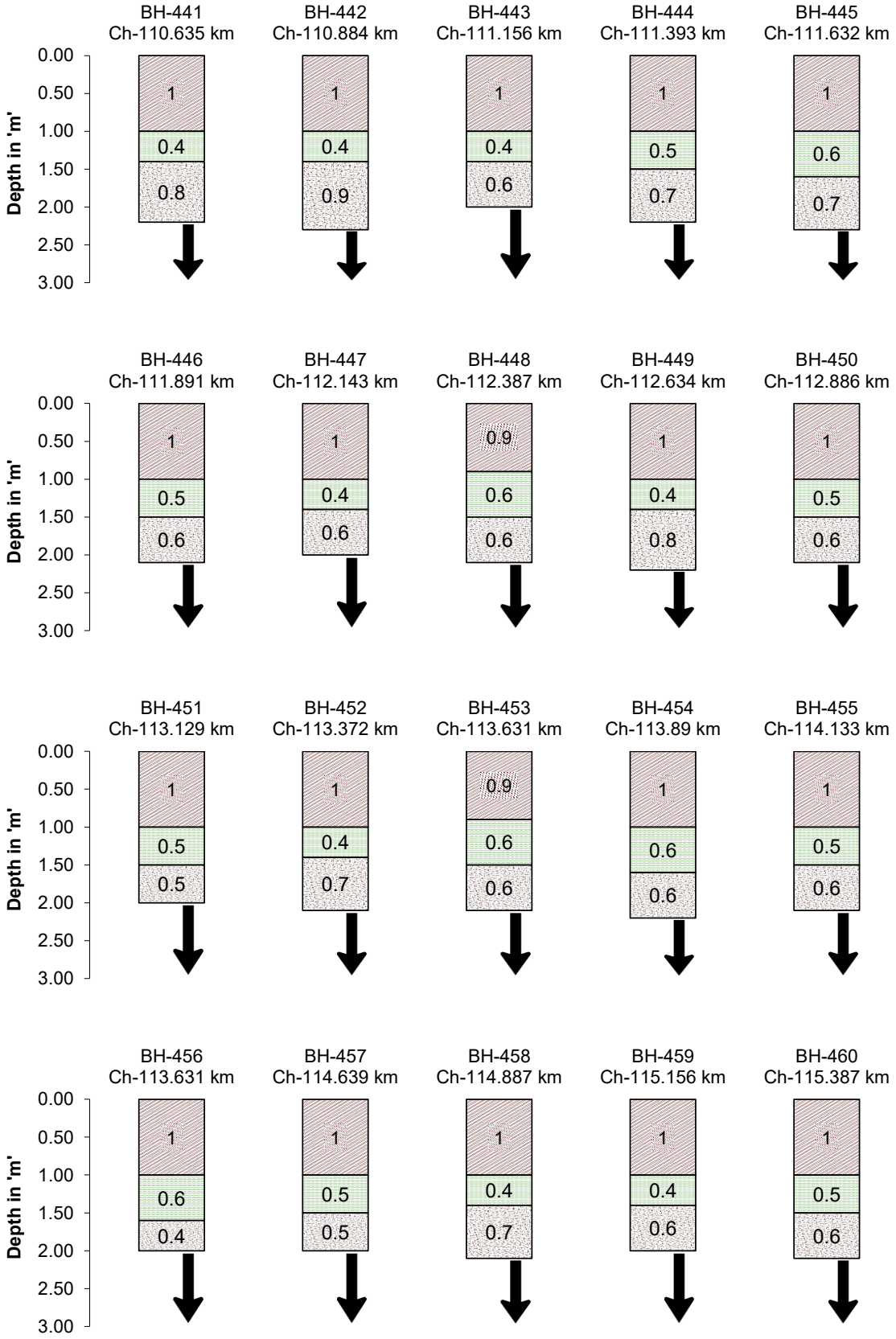
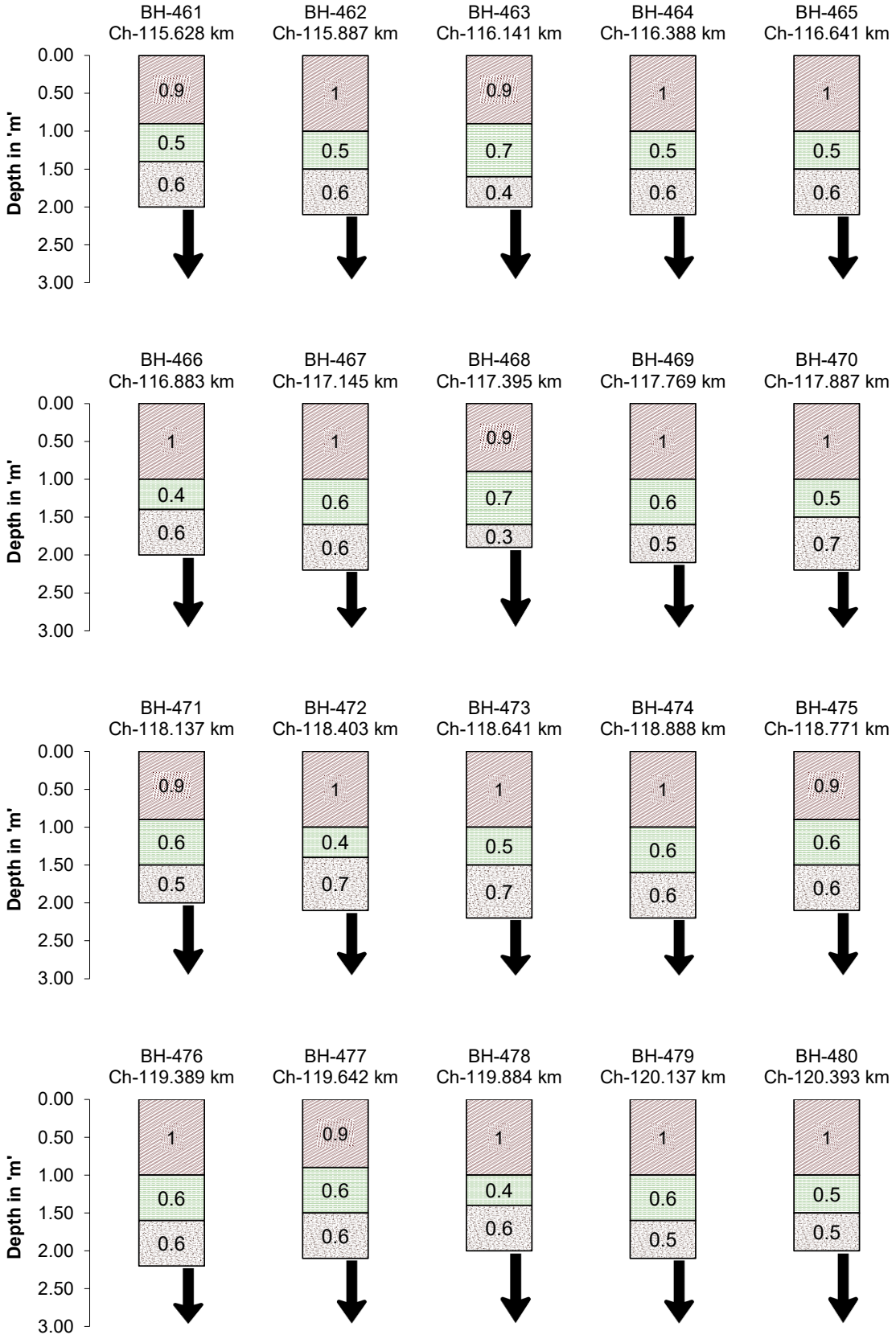
0.1
0.5
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00

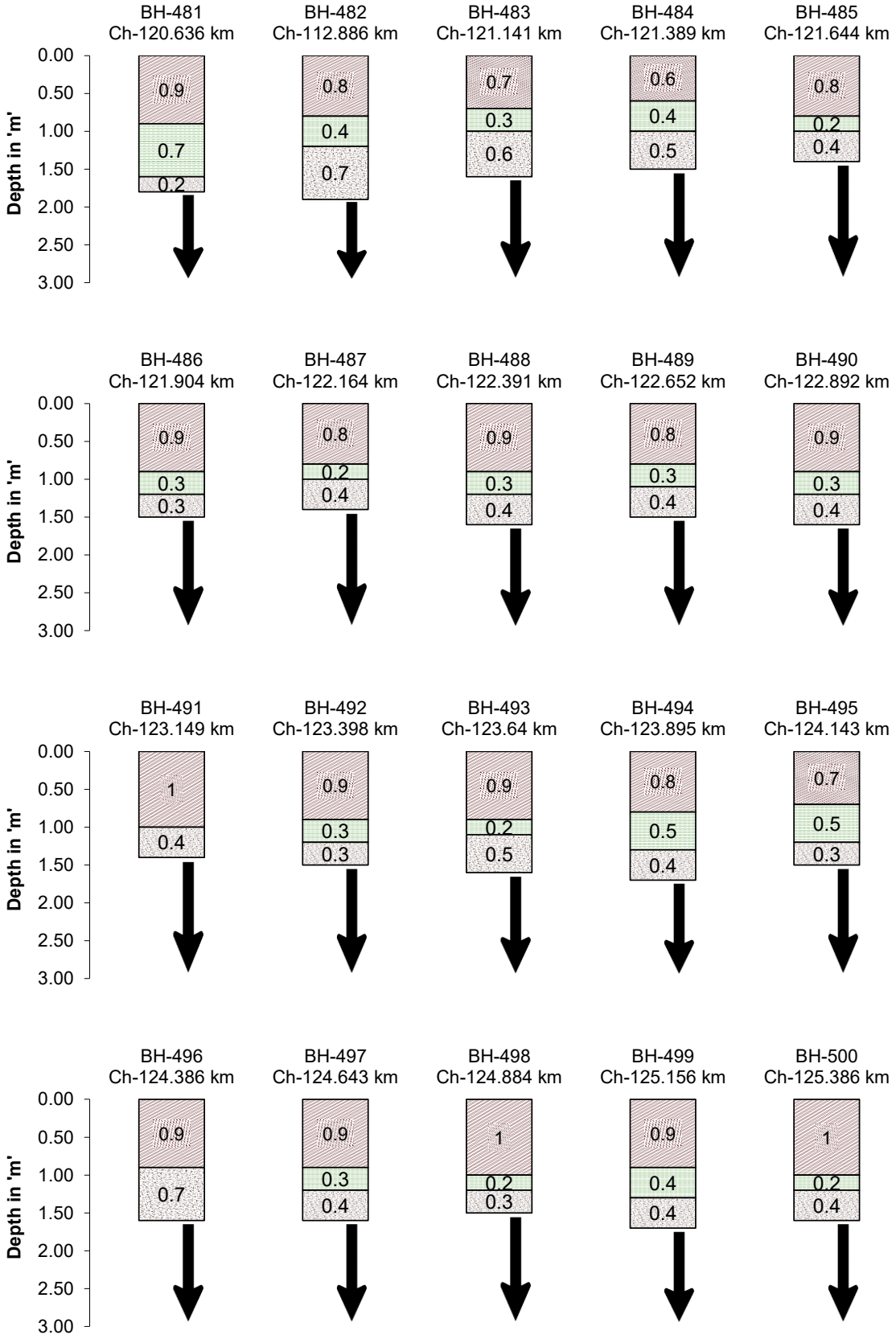

BH-381
Ch-95.548 km
0.8
0.5
0.4
BH-382
Ch-95.897 km
0.9
0.3
0.5
BH-383
Ch-96.134 km
1
0.5
BH-384
Ch-96.39 km
1
0.2
0.4
BH-385
Ch-96.64 km
1
0.3
0.4
BH-386
Ch-96.889 km
1
0.2
0.6
BH-387
Ch-97.144 km
1
0.2
0.5
BH-388
Ch-97.389 km
0.8
0.3
0.6
BH-389
Ch-97.638 km
0.9
0.3
0.4
BH-390
Ch-97.89 km
0.9
0.2
0.6
BH-391
Ch-98.137 km
0.9
0.3
0.4
BH-392
Ch-98.387 km
1
0.3
0.3
BH-393
Ch-98.639 km
1
0.2
0.5
BH-394
Ch-98.889 km
0.9
0.3
0.6
BH-395
Ch-99.14 km
1
0.2
0.5
BH-396
Ch-99.388 km
1
0.1
0.5
BH-397
Ch-99.626 km
0.9
0.1
0.7
BH-398
Ch-99.876 km
0.8
0.3
0.7
BH-399
Ch-100.142 km
0.9
0.3
0.5
BH-400
Ch-100.381 km
1
0.3
0.6
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00

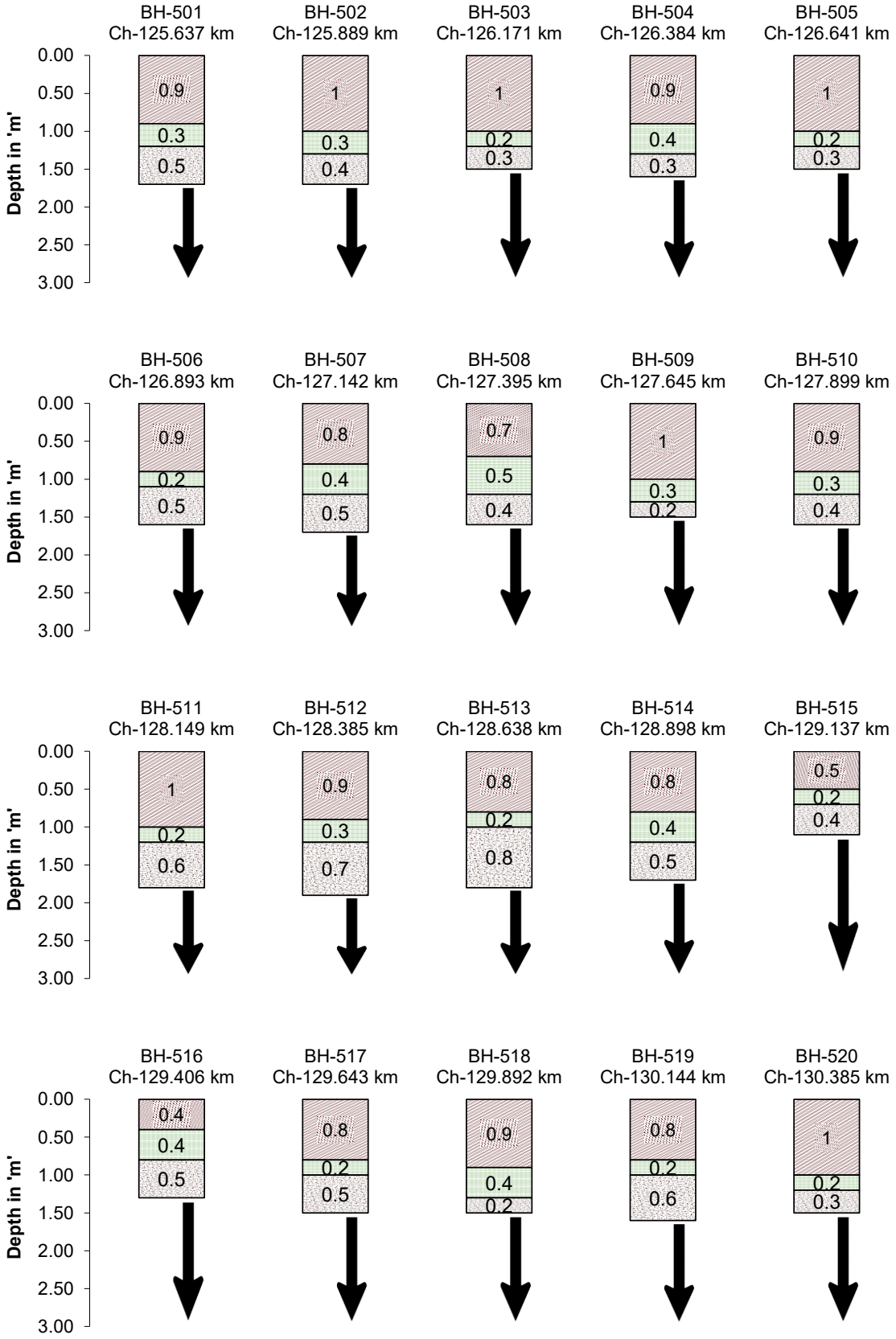

BH-401
Ch-100.649 km
0.9
0.3
0.5
BH-402
Ch-100.891 km
1
0.2
0.6
BH-403
Ch-101.142 km
1
0.3
0.4
BH-404
Ch-101.394 km
0.9
0.3
0.6
BH-405
Ch-101.631 km
1
0.1
0.6
BH-406
Ch-101.878 km
1
0.2
0.7
BH-407
Ch-102.141 km
0.9
0.2
0.7
BH-408
Ch-102.389 km
0.8
0.2
0.9
BH-409
Ch-102.638 km
0.9
0.2
0.7
BH-410
Ch-102.907 km
1
0.2
0.7
BH-411
Ch-103.147 km
0.9
0.3
0.6
BH-412
Ch-103.387 km
1
0.2
0.5
BH-413
Ch-103.635 km
0.9
0.3
0.6
BH-414
Ch-103.887 km
1
0.3
0.6
BH-415
Ch-104.146 km
0.9
0.3
0.8
BH-416
Ch-104.387 km
1
0.2
0.7
BH-417
Ch-104.643 km
0.9
0.3
0.8
BH-418
Ch-104.887 km
1
0.2
0.8
BH-419
Ch-105.134 km
0.9
0.5
0.6
BH-420
Ch-105.385 km
1
0.5
0.6
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00

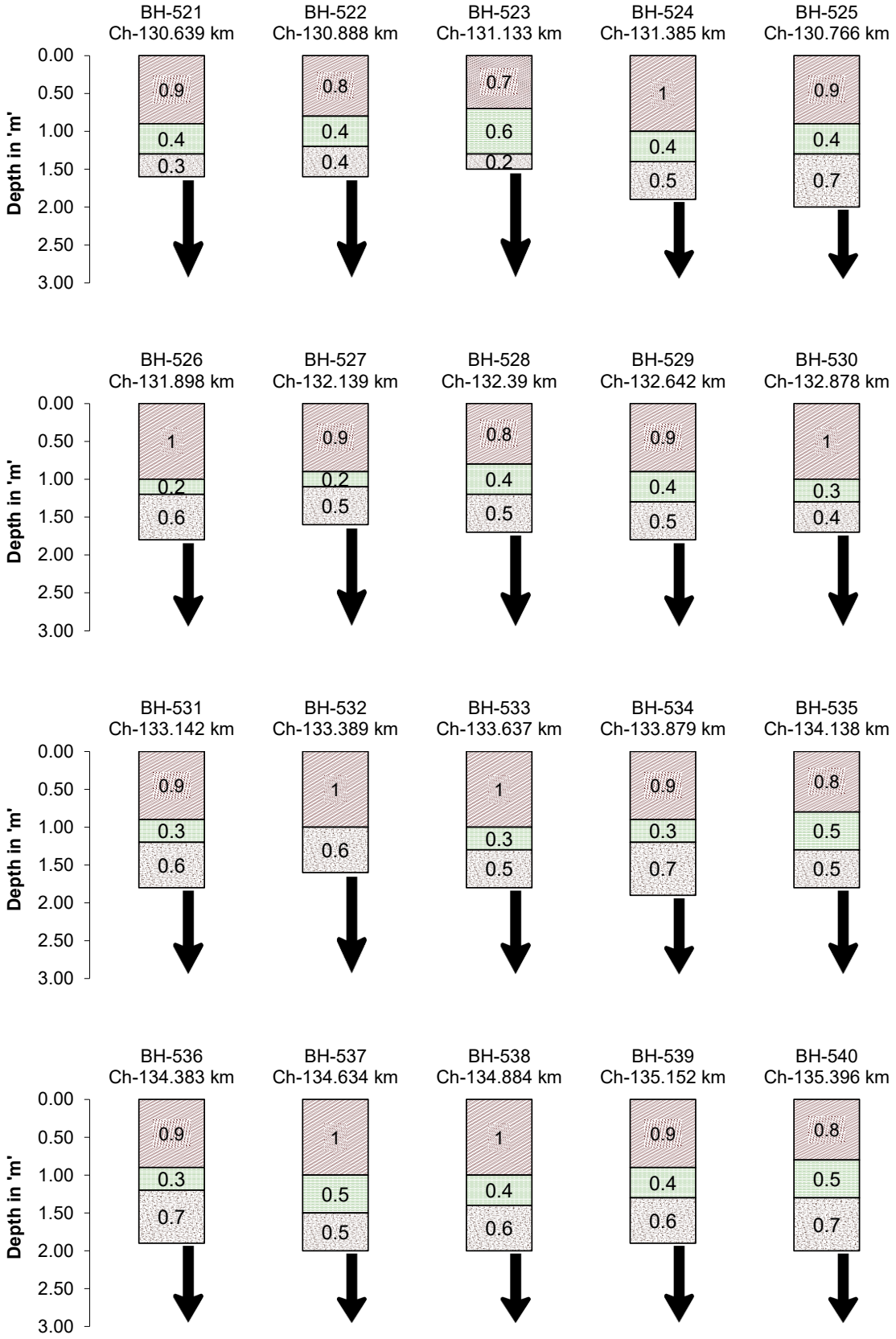

BH-421
Ch-105.633 km
1
0.6
0.4
BH-422
Ch-105.902 km
0.9
0.6
0.4
BH-423
Ch-106.142 km
1
0.6
0.4
BH-424
Ch-106.389 km
1
0.5
0.4
BH-425
Ch-106.64 km
1
0.2
0.8
BH-426
Ch-106.89 km
1
0.4
0.8
BH-427
Ch-107.143 km
0.9
0.4
0.7
BH-428
Ch-107.384 km
0.9
0.5
0.7
BH-429
Ch-107.636 km
1
0.3
0.6
BH-430
Ch-107.909 km
1
0.4
0.7
BH-431
Ch-108.132 km
0.9
0.6
0.5
BH-432
Ch-108.39 km
1
0.3
0.8
BH-433
Ch-108.652 km
1
0.5
0.7
BH-434
Ch-108.884 km
1
0.6
0.6
BH-435
Ch-109.142 km
1
0.5
0.4
BH-436
Ch-109.376 km
0.9
0.5
0.6
BH-437
Ch-109.642 km
1
0.5
0.5
BH-438
Ch-109.885 km
1
0.6
0.7
BH-439
Ch-110.144 km
0.9
0.6
0.6
BH-440
Ch-110.384 km
1
0.4
0.6
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00


BH-441
Ch-110.635 km
1
0.4
0.8
BH-442
Ch-110.884 km
1
0.4
0.9
BH-443
Ch-111.156 km
1
0.4
0.6
BH-444
Ch-111.393 km
1
0.5
0.7
BH-445
Ch-111.632 km
1
0.6
0.7
BH-446
Ch-111.891 km
1
0.5
0.6
BH-447
Ch-112.143 km
1
0.4
0.6
BH-448
Ch-112.387 km
0.9
0.6
0.6
BH-449
Ch-112.634 km
1
0.4
0.8
BH-450
Ch-112.886 km
1
0.5
0.6
BH-451
Ch-113.129 km
1
0.5
0.5
BH-452
Ch-113.372 km
1
0.4
0.7
BH-453
Ch-113.631 km
0.9
0.6
0.6
BH-454
Ch-113.89 km
1
0.6
0.6
BH-455
Ch-114.133 km
1
0.5
0.6
BH-456
Ch-113.631 km
1
0.6
0.4
BH-457
Ch-114.639 km
1
0.5
0.5
BH-458
Ch-114.887 km
1
0.4
0.7
BH-459
Ch-115.156 km
1
0.4
0.6
BH-460
Ch-115.387 km
1
0.5
0.6
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00


BH-461
Ch-115.628 km
0.9
0.5
0.6
BH-462
Ch-115.887 km
1
0.5
0.6
BH-463
Ch-116.141 km
0.9
0.7
0.4
BH-464
Ch-116.388 km
1
0.5
0.6
BH-465
Ch-116.641 km
1
0.5
0.6
BH-466
Ch-116.883 km
1
0.4
0.6
BH-467
Ch-117.145 km
1
0.6
0.6
BH-468
Ch-117.395 km
0.9
0.7
0.3
BH-469
Ch-117.769 km
1
0.6
0.5
BH-470
Ch-117.887 km
1
0.5
0.7
BH-471
Ch-118.137 km
0.9
0.6
0.5
BH-472
Ch-118.403 km
1
0.4
0.7
BH-473
Ch-118.641 km
1
0.5
0.7
BH-474
Ch-118.888 km
1
0.6
0.6
BH-475
Ch-118.771 km
0.9
0.6
0.6
BH-476
Ch-119.389 km
1
0.6
0.6
BH-477
Ch-119.642 km
0.9
0.6
0.6
BH-478
Ch-119.884 km
1
0.4
0.6
BH-479
Ch-120.137 km
1
0.6
0.5
BH-480
Ch-120.393 km
1
0.5
0.5
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00


BH-481
Ch-120.636 km
0.9
0.7
0.2
BH-482
Ch-112.886 km
0.8
0.4
0.7
BH-483
Ch-121.141 km
0.7
0.3
0.6
BH-484
Ch-121.389 km
0.6
0.4
0.5
BH-485
Ch-121.644 km
0.8
0.2
0.4
BH-486
Ch-121.904 km
0.9
0.3
0.3
BH-487
Ch-122.164 km
0.8
0.2
0.4
BH-488
Ch-122.391 km
0.9
0.3
0.4
BH-489
Ch-122.652 km
0.8
0.3
0.4
BH-490
Ch-122.892 km
0.9
0.3
0.4
BH-491
Ch-123.149 km
1
0.4
BH-492
Ch-123.398 km
0.9
0.3
0.3
BH-493
Ch-123.64 km
0.9
0.2
0.5
BH-494
Ch-123.895 km
0.8
0.5
0.4
BH-495
Ch-124.143 km
0.7
0.5
0.3
BH-496
Ch-124.386 km
0.9
0.7
BH-497
Ch-124.643 km
0.9
0.3
0.4
BH-498
Ch-124.884 km
1
0.2
0.3
BH-499
Ch-125.156 km
0.9
0.4
0.4
BH-500
Ch-125.386 km
1
0.2
0.4
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00


BH-501
Ch-125.637 km
0.9
0.3
0.5
BH-502
Ch-125.889 km
1
0.3
0.4
BH-503
Ch-126.171 km
1
0.2
0.3
BH-504
Ch-126.384 km
0.9
0.4
0.3
BH-505
Ch-126.641 km
1
0.2
0.3
BH-506
Ch-126.893 km
0.9
0.2
0.5
BH-507
Ch-127.142 km
0.8
0.4
0.5
BH-508
Ch-127.395 km
0.7
0.5
0.4
BH-509
Ch-127.645 km
1
0.3
0.2
BH-510
Ch-127.899 km
0.9
0.3
0.4
BH-511
Ch-128.149 km
1
0.2
0.6
BH-512
Ch-128.385 km
0.9
0.3
0.7
BH-513
Ch-128.638 km
0.8
0.2
0.8
BH-514
Ch-128.898 km
0.8
0.4
0.5
BH-515
Ch-129.137 km
0.5
0.2
0.4
BH-516
Ch-129.406 km
0.4
0.4
0.5
BH-517
Ch-129.643 km
0.8
0.2
0.5
BH-518
Ch-129.892 km
0.9
0.4
0.2
BH-519
Ch-130.144 km
0.8
0.2
0.6
BH-520
Ch-130.385 km
1
0.2
0.3
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00


BH-521
Ch-130.639 km
0.9
0.4
0.3
BH-522
Ch-130.888 km
0.8
0.4
0.4
BH-523
Ch-131.133 km
0.7
0.6
0.2
BH-524
Ch-131.385 km
1
0.4
0.5
BH-525
Ch-130.766 km
0.9
0.4
0.7
BH-526
Ch-131.898 km
1
0.2
0.6
BH-527
Ch-132.139 km
0.9
0.2
0.5
BH-528
Ch-132.39 km
0.8
0.4
0.5
BH-529
Ch-132.642 km
0.9
0.4
0.5
BH-530
Ch-132.878 km
1
0.3
0.4
BH-531
Ch-133.142 km
0.9
0.3
0.6
BH-532
Ch-133.389 km
1
0.6
BH-533
Ch-133.637 km
1
0.3
0.5
BH-534
Ch-133.879 km
0.9
0.3
0.7
BH-535
Ch-134.138 km
0.8
0.5
0.5
BH-536
Ch-134.383 km
0.9
0.3
0.7
BH-537
Ch-134.634 km
1
0.5
0.5
BH-538
Ch-134.884 km
1
0.4
0.6
BH-539
Ch-135.152 km
0.9
0.4
0.6
BH-540
Ch-135.396 km
0.8
0.5
0.7
Depth in 'm'
0.00
0.50
1.00
1.50
2.00
2.50
3.00