TURNING POINT (TP)		TP-122/A	TP-123
DEFLECTION ANGLE (°_ ' _ ")		2°30'00"L	14°00'00"R
DISTANCE BETWEEN TP's (m)	2099.530	682.560	2217.91
STATE & DISTRICT	DHOLKA	AHEMADABAD	GUJARAT

SURVEY DETAILS

PLANIMETRY

SCALE :-

ALONG LINE 1:5000
ACROSS LINE 1:5000

GROUND PROFILE

SCALE :-

HORIZONTAL 1:5000
VERTICAL 1:500

REFERENCE DATUM

GROUND LEVELS(m)

PIPE TOP LEVELS(m)

DISTANCE BETWEEN LEVEL POINTS (IN METRES)

SURFACE /TERRAIN DETAILS: CANAL, NALLA

CLASS/ZONE LOCATION: NOT APPLICABLE

DESIGN FACTOR: 0.72

LINE PIPE DETAILS

MATERIAL: API 5L Gr. X-70, HSAW/ LSAW

O.D.X. WALL THICKNESS (mm x mm): 610, 7.1 | 610, 7.9 | 610, 7.1

PIPELINE DETAILS

CUMULATIVE CHAINAGE (KM METRES) (000 + 000)

SECTIONAL CHAINAGE KM METERS

SPECIAL PROVISIONS

PIPE LINE COVER MINIMUM (METRES): 1.0 | 1.2 | 1.0 | 1.5 | 1.0 | 1.2 | 1.0 | 1.5 | 1.0 | 1.2 | 1.0 | 1.2 | 1.0

CROSSINGS: CART TRACK 280280/280284; CANAL 281108/281110; METAL ROAD 281611/281623; NALLA 281995/281997; METAL ROAD 282551/282563; ROAD KHAKHATI TO DHOLI 285102/285102

SPECIAL INSTALLATION FITTING/MARKERS

COATING SCHEME: LINE PIPE: THREE LAYER POLYETHYLENE COATING (3LPE) (MIN. 2.5 mm THK) AS PER SPEC. No. 6-71-0041 AND FIELD JOINT COATING HEAT SHRINK SLEEVE AS PER SPEC. NO. 6-71-0044

CATHODIC PROTECTION INSTALLATIONS: REFER GENERAL NOTE-4

SUB-SOIL DETAILS

SOIL RESISTIVITY (OHM-M): REFER GENERAL NOTE-5

SOIL STRATIFICATION DEPTH IN (m): REFER GENERAL NOTE-5

TOPOGRAPHIC SYMBOLS

PROPOSED PIPE LINE; EXISTING PIPE LINE; TURNING POINT; INTERMEDIATE POINT; METALLED ROAD; UNMETALLED ROAD; RAILWAY LINE; STREAM > 5m WIDTH; STREAM <5m WIDTH (DRY); STREAM (PERENNIAL) > 5 m; CANAL (DESCRIBED); BRIDGE; POWER LINE; TELEPHONE LINE; FENCES; GROUND PROFILE; DAM (DESCRIBED); WATER TANK, LAKE OR RESERVOIR; QUARRY; SWAMP OR MARSH; MUD; WELL (DESCRIBED)/TUBEWELL; PLACE OF WORSHIP; MONUMENT; HUTS (TEMPORARY); HUTS (PERMANENT); GRAVES; TREE

PIPELINE SYMBOLS

CATHODIC PROTECTION TEST STATION; POTENTIAL GRADIENT CONTROL MAT (PGCM); TRANSFORMER RECTIFIER; AC INTERFERANCE MITIGATION Zn RIBBON PARALLEL TO PIPE; ANODE GROUND BED; EXISTING CABLE/ PIPELINE CROSSING; HOT BEND (R=6D); CS CODUIT FOR OFC; OFC PULLING PIT; UNCASED CROSSING; CASED CROSSING; CONTINUOUS CONCERETE WEIGHTING; GEOTEXTILE BAGS; INTERMEDIATE SCRAPER STATION; INSULATING JOINT; SCRAPER TRAP; KM MARKER; PIPE LINE WARNING SIGN; AERIAL MARKER; NAVIGABLE WATER WAY PIPE LINE WARNING SIGN; DIRECTION MARKER; HDPE DUCT FOR OFC; SECTIONALISING VALVES; ZINC GROUNDING CELL

SOIL SYMBOLS

MORGANIC CLAY WITH HIGH PLASTICITY; MORGANIC CLAY WITH MEDIUM PLASTICITY; CLAYEY SAND; SILTY SAND POORLY GRADED SAND; SILT MIXTURES; MORGANIC CLAY WITH LOW PLASTICITY; MORGANIC SILT PLAY WITH MEDIUM PLASTICITY; WELL GRADED SAND; MORGANIC CLAY WITH LOW PLASTICITY; ROCK; WELL GRADED GRAVELS; SOFT ROCK WITH WAKES; WHITE LIME WITH KANKARS; POORLY GRADED SAND; CLAYEY WITH KANKAR BASALT; POORLY GRADED GRAVELS; SILTY GRAVELS POORLY GRADED; CLAYEY GRAVELS POORLY GRADED; CLAY WITH KANKAR; WEATHERED BASALT; CLAY; SILTY CLAY; SILTY SAND; SANDY CLAY WITH KANKAR; MOORUM WITH BOULDERS; WEATHERED ROCK; MOORUM; RED CLAY WITH KANKARS; SANDY MOORUM; RED ROCK; HARD ROCK; MOORUM WITH GRAVELS; EXPOSED ROCK; GREYISH CLAY; BLACK COTTON SOIL; EXPOSED WEATHERED BASALT; SILTY CLAY WITH MOORUM; CLAY WITH MOORUM; BLACK COTTON SOIL WITH KANKAR; SANDY GRAVEL; BLACK COTTON SOIL WITH KANKARS; SILTY CLAY WITH SAND; SANDY CLAY; RED ROCK; CLAYEY SILT; SILTY CLAY WITH KANKARS; CLAYEY SILT WITH KANKARS; BLACK SILTY CLAY; SANDY SILT; SWC; EXPOSED WEATHERED ROCK; CLAY WITH GRAVELS

GENERAL NOTES :-

1. LOCATION MARKERS ARE EXACT AS PER FIELD SURVEY.
2. FOR ALL CROSSINGS, THE THICKNESS OF CASING PIPES PROVIDED AS PER SPECIFIC REQUIREMENTS & THE SAME IS TABULATED IN B.O.M. ALL THE CROSSINGS EXECUTED AS PER RELEVANT OB STANDARD/DRAWINGS.
3. LOCATION OF SLOPE BREAKERS ARE PROVIDED AS PER STANDARD & AS PER INSTRUCTIONS OF ENGINEER-IN-CHARGE.
4. INSTALLATION OF CATHODIC PROTECTION FACILITIES PROVIDED AS PER DRAWINGS/ DOCUMENTS SUBMITTED BY CONTRACTOR AND APPROVED BY COMPANY.
5. FOR DETAILS REGARDING SOIL STRATIFICATION AND SOIL RESISTIVITY ALONG THE ROUTE, REFER M/S PETRO IT'S SOIL INVESTIGATION & RESISTIVITY REPORT.
6. ANTI BUOYANCY CONTROL (CONCRETE WEIGHT COATING) AND GEOTEXTILE BAGS, IF REQUIRE, SHALL BE DECIDED AT SITE (BESIDE THE LOCATION AS SHOWN IN ALIGNMENT SHEET) CASE TO CASE BASIS AND AS PER INSTRUCTION OF ENGINEER-IN-CHARGE.

NOTES :-

1. ALL LEVELS ARE IN "METERS" AND CORRESPOND TO MEAN SEA LEVEL (MSL).
2. 0.00 CHAINAGE CORRESPONDS TO INSULATING JOINT AT VADINAR.
3. ANTI BUOYANCY MEASURES, IF REQUIRED, SHALL BE DECIDED AT SITE IN CONSULTATION WITH ENGINEER-IN-CHARGE.
4. THE EXTENT OF CASE CROSSING PROVIDED AS PER INSTRUCTION OF ENGINEER-IN-CHARGE.

BILL OF MATERIAL FOR THIS DRAWING

810	7.1	X-PE		5000	K.M. POST		2
					DIRECTION MARKER		1
					AERIAL MARKER		1
				5000	INSULATING JOINTS		
					HOT BENDS		
					NAVIGABLE WATERWAY		
					WARNING MARKER		5
					OFC JOINT PIT		2
					CP TEST STATION		4

REFERENCE DRAWINGS

TITLE	NUMBER
CROSSING	CHAINAGE(m)
CART TRACK	280898
CANAL	281113
ROAD	281617
NALLA	282557
ROAD	282076

DESCRIPTION	ECIL	EIL	BORL
AS BUILT DRAWING			

AS BUILT DRAWING

इंजीनियर्स इंडिया लिमिटेड ENGINEERS INDIA LIMITED (A Govt. of India Undertaking)

BHARAT OMAN REFINERIES LIMITED

ESSAR ESSAR CONSTRUCTIONS (INDIA) LIMITED

बीना रिफायनरी परियोजना (वाडीनार बीना पाइपलाइन) BINA REFINERY PROJECT (VADINAR-BINA PIPELINE)

एलाइनमेन्ट शीट वाडीनार से बीना चैनेज 280.274 से 285.274 कि.मी. ALIGNMENT SHEET VADINAR TO BINA CHAINAGE 280.274 KM TO 285.274 KM

SCALE	JOB NO.	UNIT	DEPT.	SECT.	DWG. NO.	REV.
AS SHOWN	12015004	16	71	12	57	0