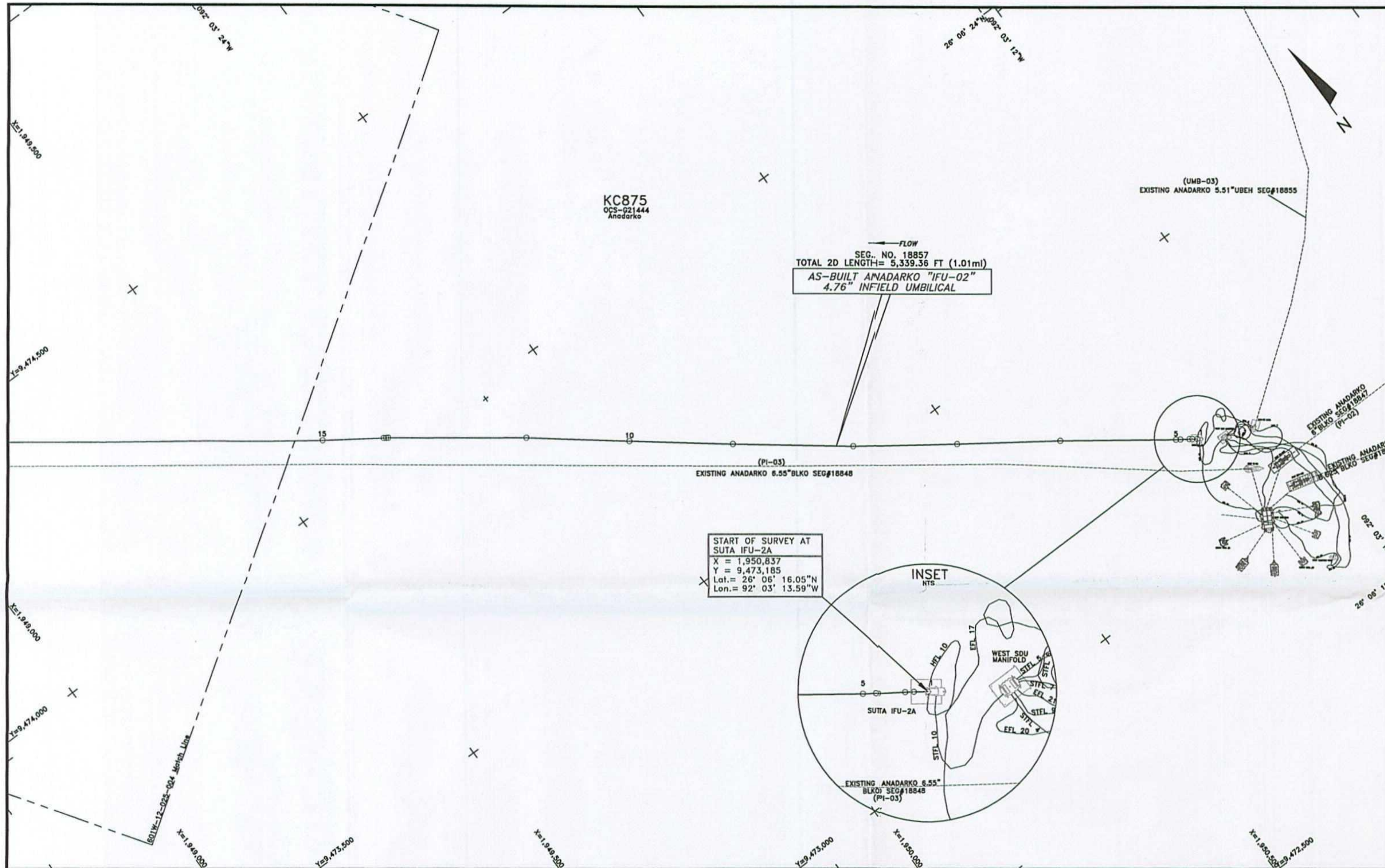
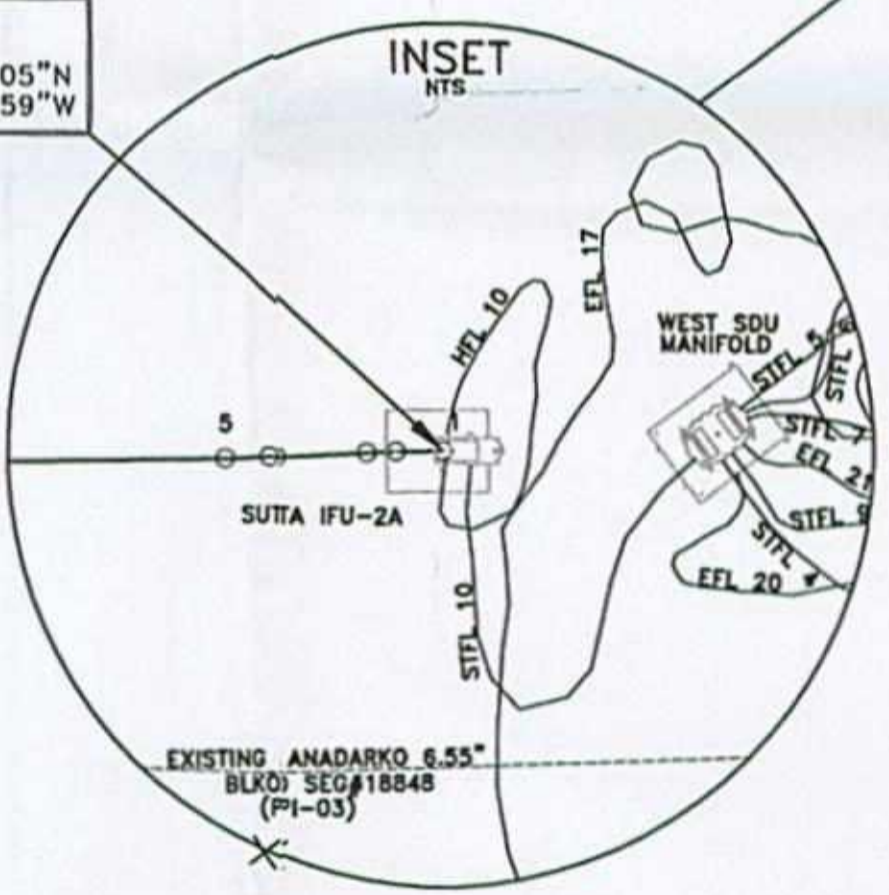


PLAN VIEW



SEG. NO. 18857
TOTAL 2D LENGTH= 5,339.36 FT (1.01mi)
AS-BUILT ANADARKO "IFU-02"
4.76" INFIELD UMBILICAL

START OF SURVEY AT
SUTA IFU-2A
X = 1,950,837
Y = 9,473,185
Lat. = 26° 06' 16.05"N
Lon. = 92° 03' 13.59"W



AS-BUILT ANADARKO 4.76" INFIELD UMBILICAL (IFU-02) SEGMENT#18857

POINT	X-COORDINATE	Y-COORDINATE	DESCRIPTION
1	1,950,837	9,473,185	SUTA IFU-2A
2	1,950,831	9,473,190	FLANGE/START OF SPAN
3	1,950,826	9,473,193	START OF BEND RESTRICTOR
4	1,950,813	9,473,202	END OF BEND RESTRICTOR
5	1,950,807	9,473,206	END OF SPAN
6	1,950,643	9,473,326	ROV FIX
7	1,950,496	9,473,429	ROV FIX
8	1,950,349	9,473,533	ROV FIX
9	1,950,182	9,473,662	ROV FIX
10	1,950,041	9,473,773	ROV FIX
11	1,949,900	9,473,885	ROV FIX
12	1,949,705	9,474,029	START OF BURIAL
13	1,949,702	9,474,031	END OF BURIAL
14	1,949,698	9,474,033	START OF SPAN
15	1,949,611	9,474,093	END OF SPAN

NOTES

- 1) UMBILICAL COORDINATES ARE THE POSITIONS OF THE R.O.V. (REMOPLY OPERATED VEHICLE) LOCATED AT THE POINTS USING VERIPOS LD2 ULTRA DGPS RECEIVING SPOTBEAM CORRECTIONS, VERIPOS STANDARD DGPS RECEIVING INMARSAT CORRECTIONS POSITIONING AND SONARDYNE FUSION LBL (LONG BASELINE) ACOUSTIC POSITIONING.
- 2) SURVEYED COORDINATES TRANSFORMED FROM NAD83 (GPS DATUM) NADCON VERSION 2.1.
- 3) THIS DRAWING IS NOT FOR NAVIGATION. PIPELINES AND FEATURES IN THE IMMEDIATE VICINITY ARE OBTAINED FROM BOEM (BUREAU OF OCEAN ENERGY MANAGEMENT) & BSEE (BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT) DATABASE AND CLIENT PROVIDED DATA.
- 4) AS-BUILT SURVEY DATE: SEPTEMBER 17th, 2013 & APRIL 7th, 2014

LEGEND

- AS-BUILT 4.76" INFIELD UMBILICAL (IFU-02) SEG#18857
- EXISTING PIPELINES/UMBILICALS/FLYING LEADS/JUMPERS
- PROPOSED PIPELINES/UMBILICALS/FLYING LEADS/JUMPERS
- UTEC AS-LAID FLYING LEADS
- LEASE BLOCK BOUNDARIES
- PROPOSED STRUCTURES
- EXISTING STRUCTURES
- UTEC AS-FOUND/AS-BUILT STRUCTURES
- GEOGRAPHICAL TICKS
- UTM TICKS
- WELLS

GEODESY

Survey Datum: NAD 27
Ellipsoid: Clarke 1866
Projection: Universal Transverse Mercator ZONE 15N
Longitude of Central Meridian: 93°W
False Easting (m): 500 000
False Northing (m): 0
Scale Factor of Central Meridian: 0.99980
Units: US Survey Feet

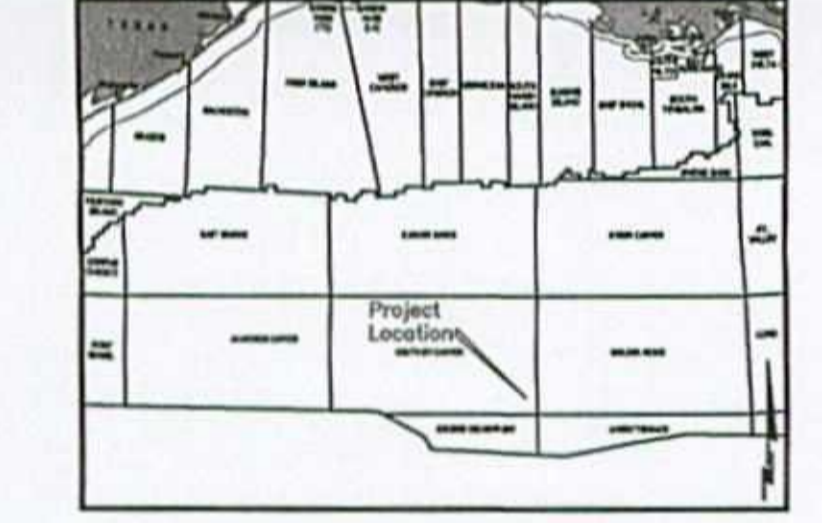
CERTIFIED CORRECT AS TO THE HORIZONTAL POSITION OF THE AS-BUILT UMBILICAL BASED ON THE SURVEY METHODS NOTED.



NATHAN EBY, R.P.L.S.
TEXAS REG #6198

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LOCATION PLAN (N.T.S)

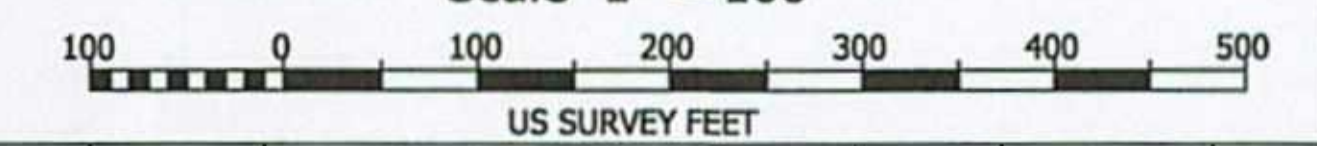


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LUCIUS DEVELOPMENT PROJECT
AS-BUILT ANADARKO 4.76" INFIELD UMBILICAL (IFU-02)

SEGMENT#18857
KEATHLEY CANYON BLOCK 875
GULF OF MEXICO

Scale 1" = 100'

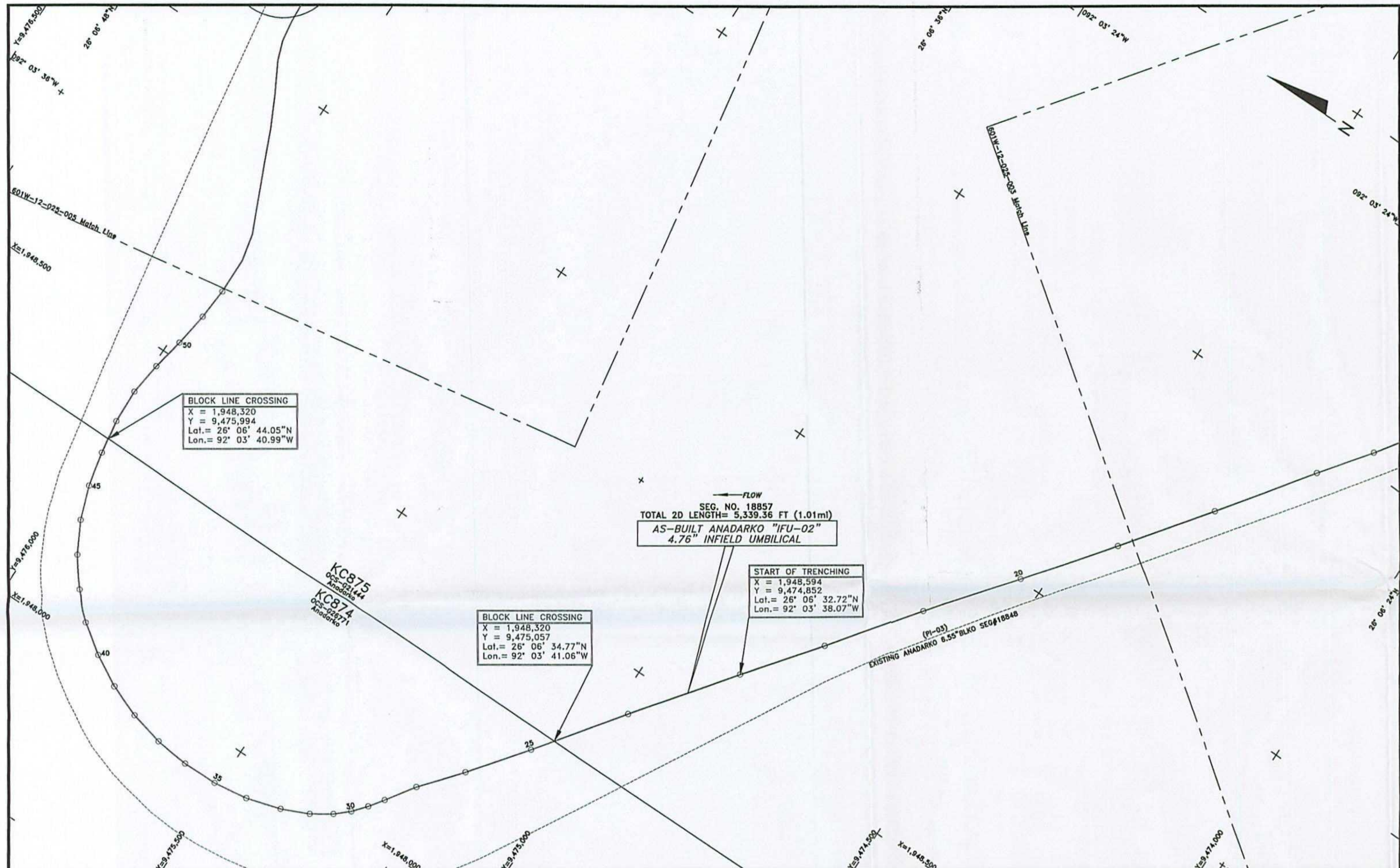


Rev. No.	Date	Comment	Interpr.	Checked	Appr.
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A2	08/14/14	ISSUED FOR CLIENT COMMENTS	VR	EG	JL
A1	07/24/14	ISSUED FOR CLIENT COMMENTS	VR	EG	JL

Survey Dates: September 17, 2013 & April 7, 2014 Survey Vessel: IRON HORSE

UTEC Ref. No. 601W-12-025	UTEC Drawing No. 601AE-12-025- 028	Sheet 001	Of 003
Plot Size ANSI D			

PLAN VIEW



BLOCK LINE CROSSING
 X = 1,948,320
 Y = 9,475,994
 Lat. = 26° 06' 44.05"N
 Lon. = 92° 03' 40.99"W

FLOW
 SEG. NO. 18857
 TOTAL 2D LENGTH = 5,339.36 FT (1.01mi)
 AS-BUILT ANADARKO "IFU-02"
 4.76" INFIELD UMBILICAL

START OF TRENCHING
 X = 1,948,594
 Y = 9,474,852
 Lat. = 26° 06' 32.72"N
 Lon. = 92° 03' 38.07"W

BLOCK LINE CROSSING
 X = 1,948,320
 Y = 9,475,057
 Lat. = 26° 06' 34.77"N
 Lon. = 92° 03' 41.06"W

AS-BUILT ANADARKO 4.76" INFIELD UMBILICAL (IFU-02) SEGMENT#18857

POINT	X-COORDINATE	Y-COORDINATE	DESCRIPTION	POINT	X-COORDINATE	Y-COORDINATE	DESCRIPTION
16	1,949,530	9,474,151	START OF SPAN	41	1,948,035	9,475,848	ROV FIX
17	1,949,446	9,474,214	END OF SPAN	42	1,948,077	9,475,891	ROV FIX
18	1,949,293	9,474,325	ROV FIX	43	1,948,126	9,475,927	ROV FIX
19	1,949,148	9,474,432	ROV FIX	44	1,948,179	9,475,956	ROV FIX
20	1,949,004	9,474,541	ROV FIX	45	1,948,236	9,475,976	ROV FIX
21	1,948,862	9,474,650	ROV FIX	46	1,948,294	9,475,990	ROV FIX
22	1,948,717	9,474,757	ROV FIX	47	1,948,353	9,475,999	ROV FIX
23	1,948,594	9,474,852	START OF TRENCHING	48	1,948,413	9,476,002	ROV FIX
24	1,948,431	9,474,976	ROV FIX	49	1,948,471	9,475,995	ROV FIX
25	1,948,285	9,475,082	ROV FIX	50	1,948,527	9,475,984	ROV FIX
26	1,948,190	9,475,155	ROV FIX	51	1,948,587	9,475,976	ROV FIX
27	1,948,120	9,475,212	ROV FIX	52	1,948,643	9,475,971	ROV FIX
28	1,948,070	9,475,246	ROV FIX				
29	1,948,045	9,475,264	ROV FIX				
30	1,948,021	9,475,284	ROV FIX				
31	1,948,000	9,475,307	ROV FIX				
32	1,947,978	9,475,341	ROV FIX				
33	1,947,956	9,475,388	ROV FIX				
34	1,947,939	9,475,448	ROV FIX				
35	1,947,930	9,475,508	ROV FIX				
36	1,947,929	9,475,569	ROV FIX				
37	1,947,935	9,475,630	ROV FIX				
38	1,947,949	9,475,689	ROV FIX				
39	1,947,970	9,475,745	ROV FIX				
40	1,947,999	9,475,799	ROV FIX				

NOTES

- 1) UMBILICAL COORDINATES ARE THE POSITIONS OF THE R.O.V. (REMOTELY OPERATED VEHICLE) LOCATED AT THE POINTS USING VERIPOS LD2 ULTRA DGPS RECEIVING SPOTBEAM CORRECTIONS, VERIPOS STANDARD DGPS RECEIVING INMARSAT CORRECTIONS POSITIONING AND SONARDYNE FUSION LBL (LONG BASELINE) ACOUSTIC POSITIONING.
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- 4) AS-BUILT SURVEY DATE: SEPTEMBER 17th, 2013 & APRIL 7th, 2014

LEGEND

- AS-BUILT 4.76" INFIELD UMBILICAL (IFU-02) SEG#18857
- EXISTING PIPELINES/UMBILICALS/FLYING LEADS/JUMPERS
- PROPOSED PIPELINES/UMBILICALS/FLYING LEADS/JUMPERS
- UTEC AS-LAID FLYING LEADS
- LEASE BLOCK BOUNDARIES
- PROPOSED STRUCTURES
- EXISTING STRUCTURES
- UTEC AS-FOUND/AS-BUILT STRUCTURES
- GEOGRAPHICAL TICKS
- UTM TICKS
- WELLS

GEODESY

Survey Datum: NAD 27
 Ellipsoid: Clarke 1866
 Projection: Universal Transverse Mercator ZONE 15N
 Longitude of Central Meridian: 93°W
 False Easting (m): 500 000
 False Northing (m): 0
 Scale Factor at Central Meridian: 0.99960
 Units: US Survey Feet

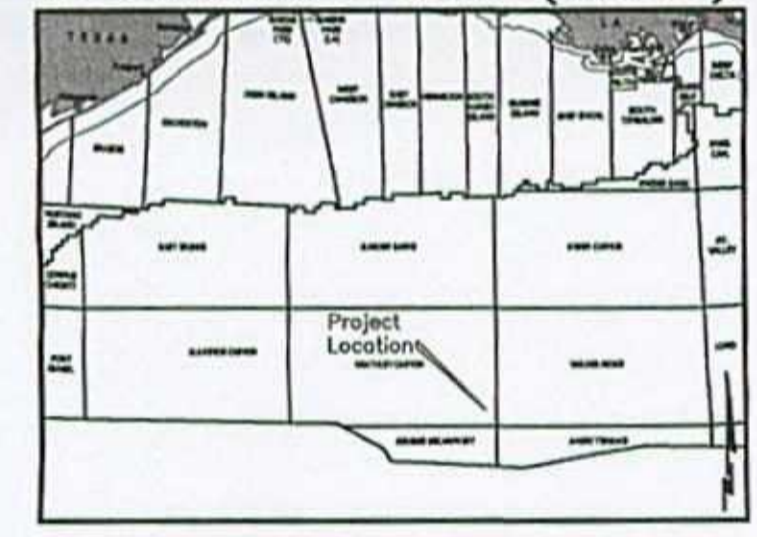
CERTIFIED CORRECT AS TO THE HORIZONTAL POSITION OF THE AS-BUILT UMBILICAL BASED ON THE SURVEY METHODS NOTED.



Nathan J. Eby, R.P.L.S.
 TEXAS REG #6198

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LOCATION PLAN (N.T.S)

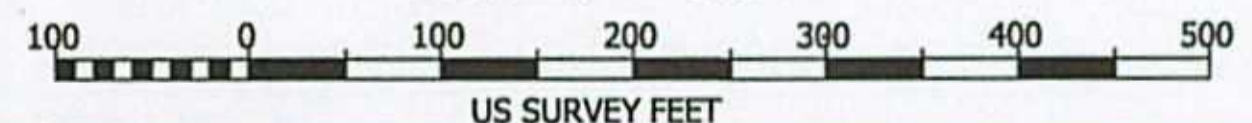


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LUCIUS DEVELOPMENT PROJECT
 AS-BUILT ANADARKO 4.76" INFIELD UMBILICAL (IFU-02)

SEGMENT#18857
 KEATHLEY CANYON BLOCK 875
 GULF OF MEXICO

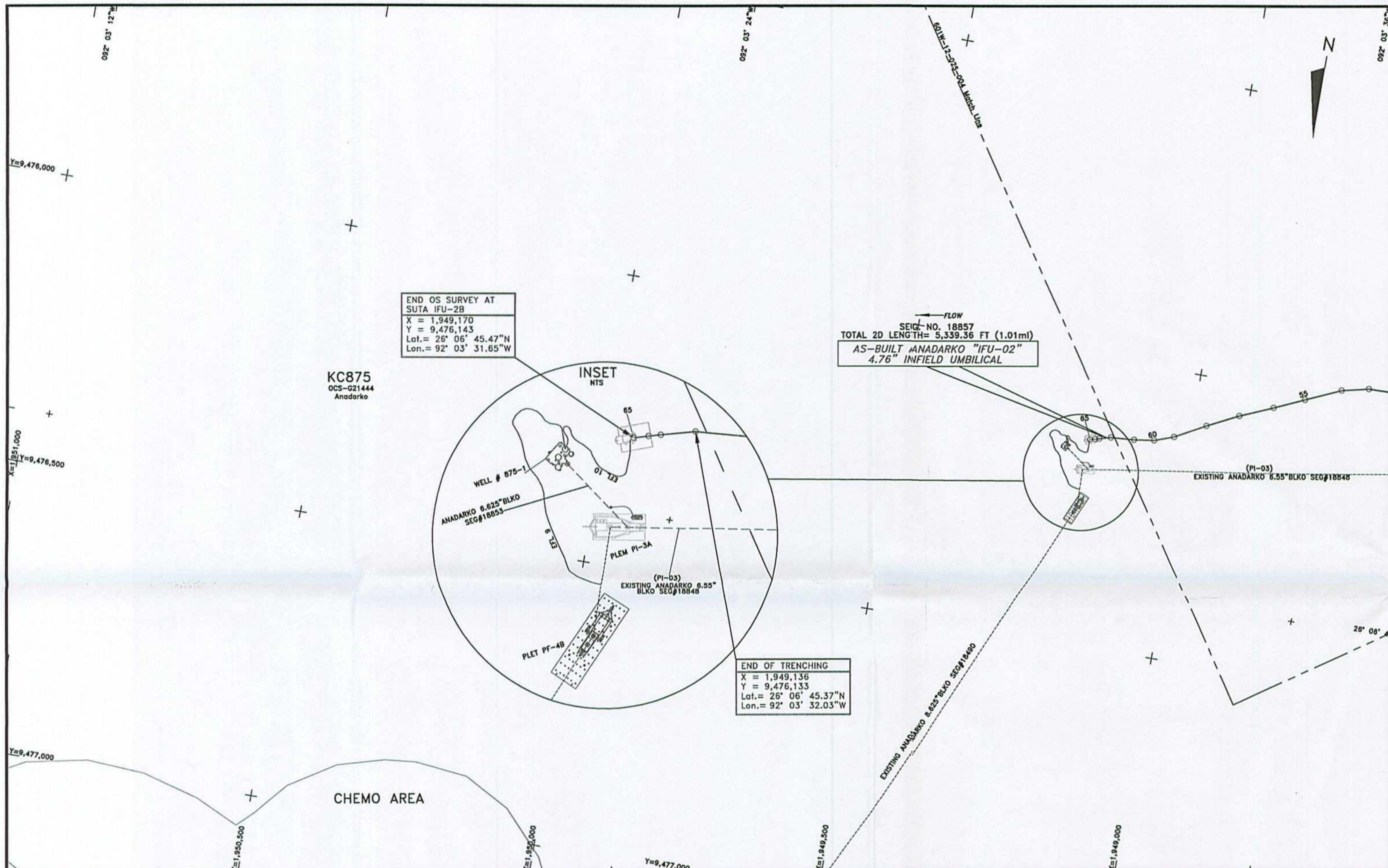
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Rev. No.	Date	Comment	Interpr.	Checked	Appr.
0	09/08/14	ISSUED AS FINAL	VR	EG	JL
A2	08/14/14	ISSUED FOR CLIENT COMMENTS	VR	EG	JL
A1	07/24/14	ISSUED FOR CLIENT COMMENTS	VR	EG	JL

Survey Dates: September 17, 2013 & April 7, 2014		Survey Vessel: IRON HORSE	
UTEC Ref. No. 601W-12-025	UTEC Drawing No. 601AE-12-025- 029	Sheet	Of
Plot Size ANSI D		002	003

PLAN VIEW

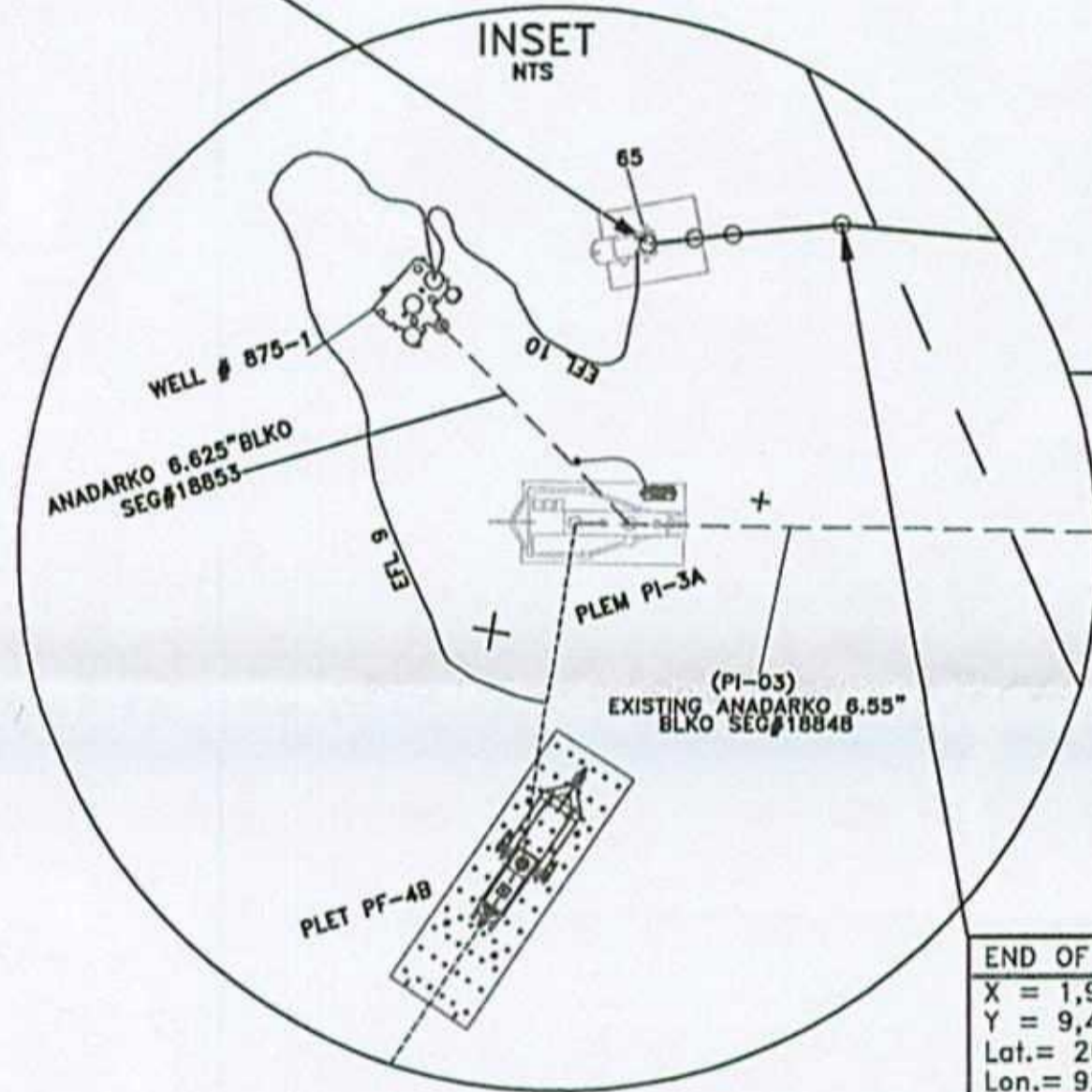


END OS SURVEY AT
SUTA IFU-2B
X = 1,949,170
Y = 9,476,143
Lat. = 26° 06' 45.47"N
Lon. = 92° 03' 31.65"W

SEIG-NO. 18857
TOTAL 2D LENGTH= 5,339.36 FT (1.01mi)
AS-BUILT ANADARKO "IFU-02"
4.76" INFIELD UMBILICAL

END OF TRENCHING
X = 1,949,136
Y = 9,476,133
Lat. = 26° 06' 45.37"N
Lon. = 92° 03' 32.03"W

KC875
OCS-G21444
Anadarko



CHEMO AREA

AS-BUILT ANADARKO 4.76" INFIELD UMBILICAL (IFU-02) SEGMENT#18857

POINT	X-COORDINATE	Y-COORDINATE	DESCRIPTION
53	1,948,706	9,475,972	ROV FIX
54	1,948,753	9,475,963	ROV FIX
55	1,948,814	9,476,010	ROV FIX
56	1,948,865	9,476,033	ROV FIX
57	1,948,921	9,476,058	ROV FIX
58	1,948,975	9,476,085	ROV FIX
59	1,949,028	9,476,113	ROV FIX
60	1,949,061	9,476,125	ROV FIX
61	1,949,096	9,476,130	ROV FIX
62	1,949,136	9,476,133	END OF TRENCHING
63	1,949,155	9,476,138	START OF BEND RESTRICTOR
64	1,949,162	9,476,140	END OF BEND RESTRICTOR
65	1,949,170	9,476,143	SUTA IFU-2B

2D LENGTH OF SURVEY POINTS 1 THROUGH 65:
5,339.36' = 1.01 MILES

NOTES

- 1) UMBILICAL COORDINATES ARE THE POSITIONS OF THE R.O.V. (REMOTELY OPERATED VEHICLE) LOCATED AT THE POINTS USING VERIPPOS LD2 ULTRA DGPS RECEIVING SPOTBEAM CORRECTIONS, VERIPPOS STANDARD DGPS RECEIVING INMARSAT CORRECTIONS POSITIONING AND SONARDYNE FUSION LBL (LONG BASELINE) ACOUSTIC POSITIONING.
- 2) SURVEYED COORDINATES TRANSFORMED FROM NAD83 (GPS DATUM) NADCON VERSION 2.1.
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- 4) AS-BUILT SURVEY DATE: SEPTEMBER 17th, 2013 & APRIL 7th, 2014

LEGEND

- AS-BUILT 4.76" INFIELD UMBILICAL (IFU-02) SEG#18857
- EXISTING PIPELINES/UMBILICALS/FLYING LEADS/JUMPERS
- PROPOSED PIPELINES/UMBILICALS/FLYING LEADS/JUMPERS
- UTEC AS-FOUND/AS-BUILT FLYING LEADS
- KC875 LEASE BLOCK BOUNDARIES
- PROPOSED STRUCTURES
- EXISTING STRUCTURES
- UTEC AS-FOUND/AS-BUILT STRUCTURES
- + GEOGRAPHICAL TICKS
- + UTM TICKS
- o WELLS

GEODESY

Survey Datum: NAD 27
Ellipsoid: Clarke 1886
Projection: Universal Transverse Mercator ZONE 15N
Longitude of Central Meridian: 93°W
False Easting (m): 500 000
False Northing (m): 0
Scale Factor of Central Meridian: 0.99960
Units: US Survey Feet

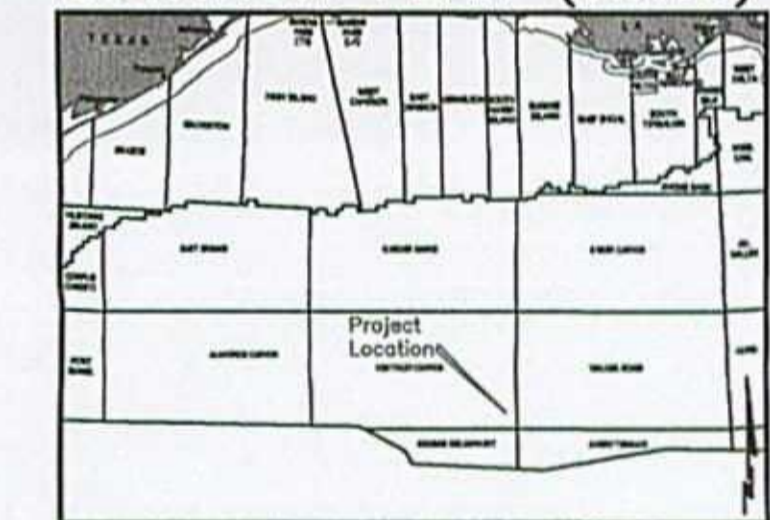
CERTIFIED CORRECT AS TO THE HORIZONTAL POSITION OF THE AS-BUILT UMBILICAL BASED ON THE SURVEY METHODS NOTED.



Nathan Eby 09/08/14
NATHAN EBY, R.P.L.S.
TEXAS REG #6198

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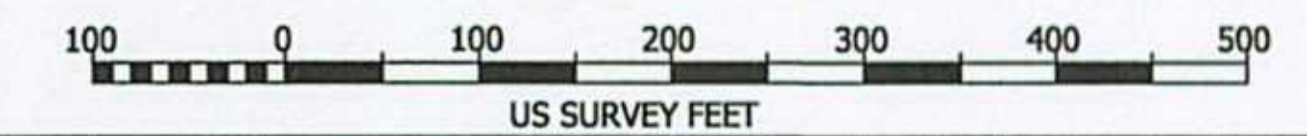
LOCATION PLAN (N.T.S)



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LUCIUS DEVELOPMENT PROJECT
AS-BUILT ANADARKO 4.76" INFIELD UMBILICAL (IFU-02)
SEGMENT#18857
KEATHLEY CANYON BLOCK 875
GULF OF MEXICO

Scale 1" = 100'

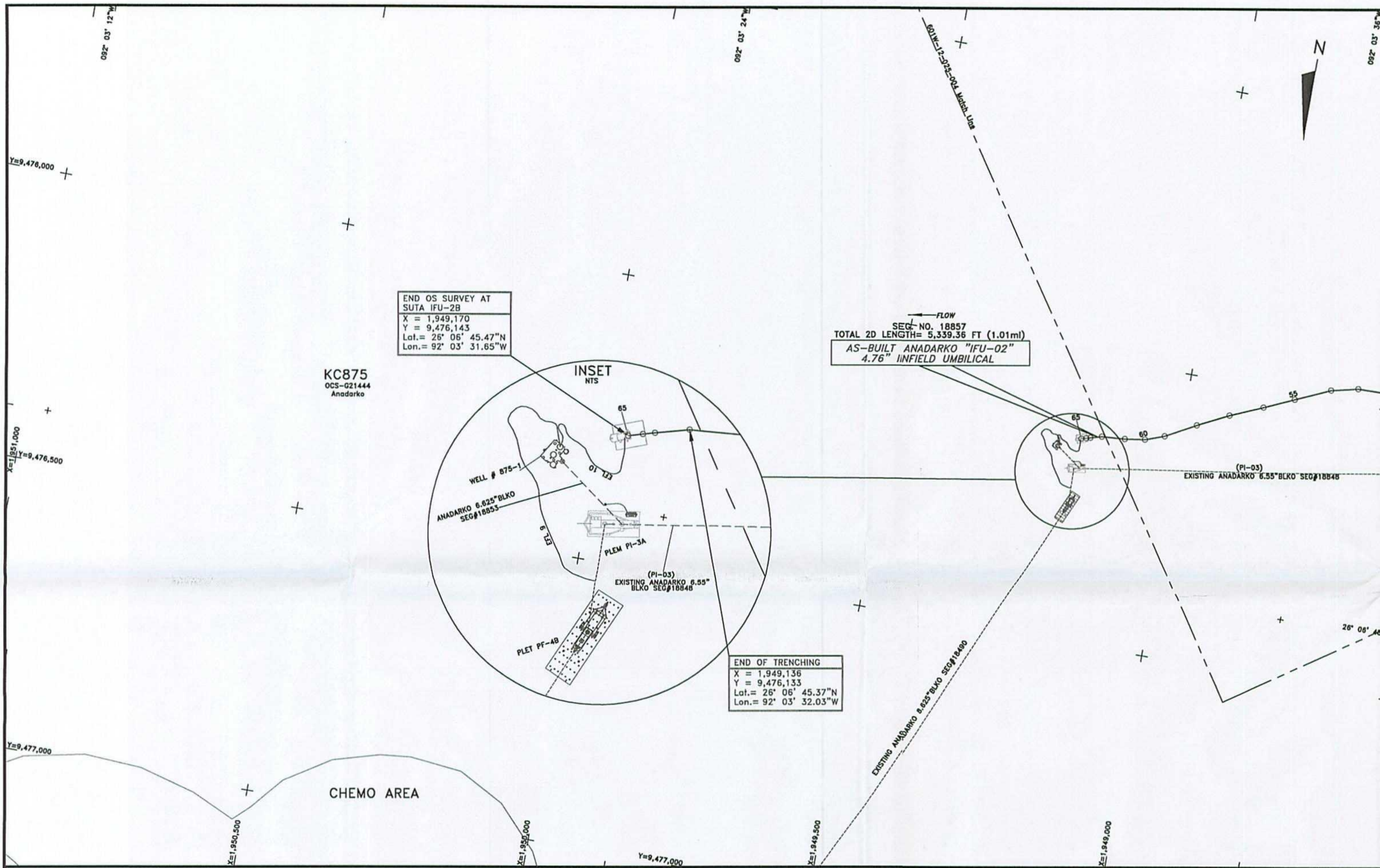


Rev. No.	Date	Comment	Interpr.	Checked	Appr.
0	09/08/14	ISSUED AS FINAL	VR	EG	JL
A2	08/14/14	ISSUED FOR CLIENT COMMENTS	VR	EG	JL
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Survey Dates: September 17, 2013 & April 7, 2014 | Survey Vessel: IRON HORSE

UTEC Ref. No. 601W-12-025	UTEC Drawing No. 601AE-12-025- 030	Sheet 003	Of 003
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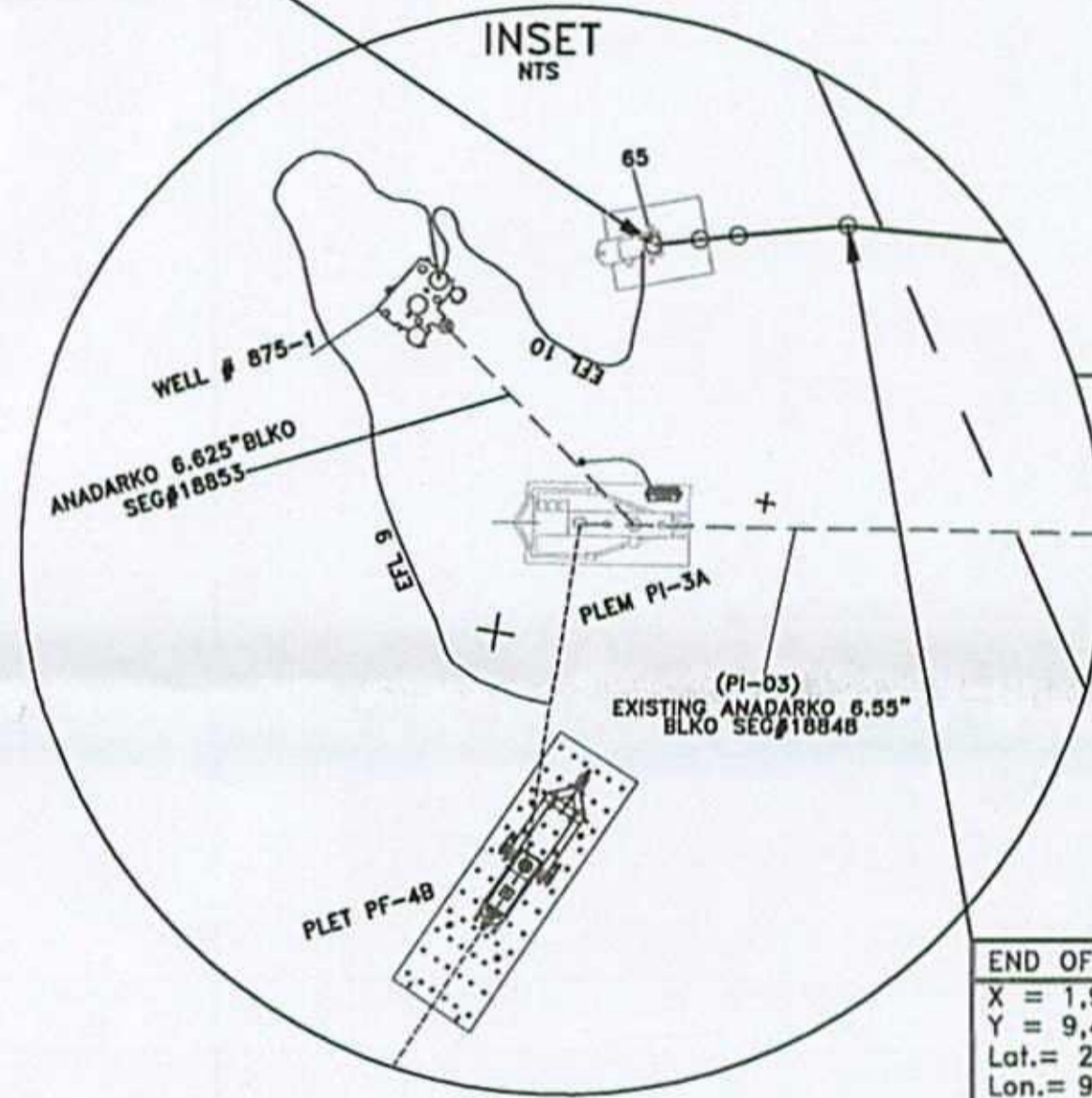
PLAN VIEW



END OS SURVEY AT
SUTA IFU-2B
X = 1,949,170
Y = 9,476,143
Lat. = 26° 06' 45.47"N
Lon. = 92° 03' 31.65"W

SEG-NO. 18857
TOTAL 2D LENGTH = 5,339.36 FT (1.01mi)
AS-BUILT ANADARKO "IFU-02"
4.76" INFIELD UMBILICAL

END OF TRENCHING
X = 1,949,136
Y = 9,476,133
Lat. = 26° 06' 45.37"N
Lon. = 92° 03' 32.03"W



- NOTES**
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 - 4) AS-BUILT SURVEY DATE: SEPTEMBER 17th, 2013 & APRIL 7th, 2014

LEGEND

---	AS-BUILT 4.76" INFIELD UMBILICAL (IFU-02) SEG#18857
---	EXISTING PIPELINES/UMBILICALS/FLYING LEADS/JUMPERS
---	PROPOSED PIPELINES/UMBILICALS/FLYING LEADS/JUMPERS
---	UTEC AS-LAID FLYING LEADS
---	LEASE BLOCK BOUNDARIES
■	PROPOSED STRUCTURES
■	EXISTING STRUCTURES
■	UTEC AS-FOUND/AS-BUILT STRUCTURES
+	GEOGRAPHICAL TICKS
+	UTM TICKS
o	WELLS

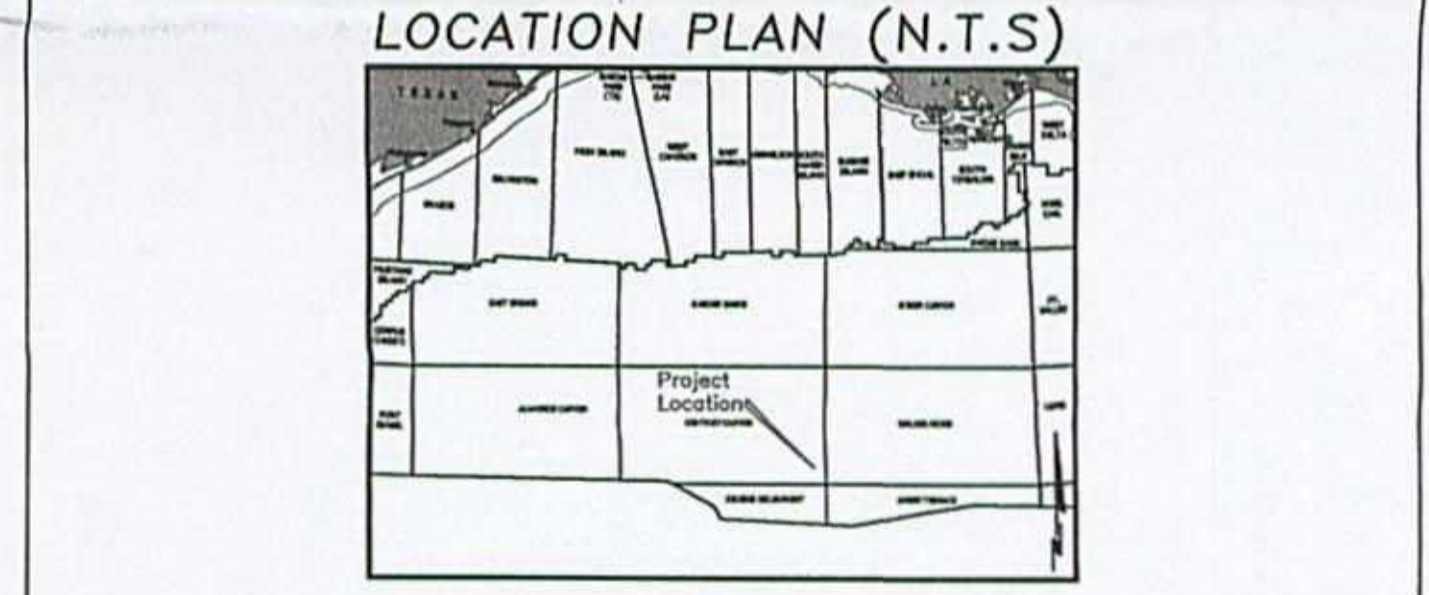
GEODESY

Survey Datum: NAD 27
Ellipsoid: Clarke 1866
Projection: Universal Transverse Mercator ZONE 15N
Longitude of Central Meridian: 93°W
False Easting (m): 500 000
False Northing (m): 0
Scale Factor of Central Meridian: 0.99960
Units: US Survey Feet

CERTIFIED CORRECT AS TO THE HORIZONTAL POSITION OF THE AS-BUILT UMBILICAL BASED ON THE SURVEY METHODS NOTED.

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AS-BUILT ANADARKO 4.76" INFIELD UMBILICAL (IFU-02) SEGMENT#18857

POINT	X-COORDINATE	Y-COORDINATE	DESCRIPTION
53	1,948,706	9,475,972	ROV FIX
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2D LENGTH OF SURVEY POINTS 1 THROUGH 65:
5,339.36' = 1.01 MILES

LUCIUS DEVELOPMENT PROJECT
AS-BUILT ANADARKO 4.76" INFIELD UMBILICAL (IFU-02)
SEGMENT#18857
KEATHLEY CANYON BLOCK 875
GULF OF MEXICO

Scale 1" = 100'

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Survey Dates: September 17, 2013 & April 7, 2014 | Survey Vessel: IRON HORSE

UTEC Ref. No. 601W-12-025	UTEC Drawing No. 601AE-12-025- 030	Sheet 003	Of 003
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