30-015-40347

OCCIDENTAL PERMIAN LTD.

Hay Hollow Bone Spring
Eddy County, NM
Devon "8" Fee#2H
VH - Job #32K0812998

Survey: Gyro

SDI Standard Survey Report

This survey is correct to the best of my knowledge and is supported by actual field data.

Notarized this date 8th of October, 2012.

Notary Signature
County of Midland
State of Texas

NOTARY PUBLIC STATE OF TEXAS
CARRIE REED
My Commission Expires
October 4, 2015

Scientific Drilling

Surface - 504'

Scientific Drilling International, Inc.

SDI Standard Survey Report

Scientific Drilling

Company:	OCCIDENTAL PERMIAN LTD	**Local Co-ordinate Reference:**	Well Devon "8" Fee#2H
Project:	Hay Hollow Bone Spring	**TVD Reference:**	WELL @ 0 00usft (Original Well Elev)
Site:	Eddy County, NM	**MD Reference:**	WELL @ 0 00usft (Original Well Elev)
Well:	Devon "8" Fee#2H	**North Reference:**	Grid
Wellbore:	VH - Job #32K0812998	**Survey Calculation Method:**	Minimum Curvature
Design:	VH - Job #32K0812998	**Database:**	EDM-Regulatory

Project Hay Hollow Bone Spring

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site Eddy County, NM

Site Position:		**Northing:**	418,024 62 usft	**Latitude:**	32° 8' 56 596 N
From:	Lat/Long	**Easting:**	571,702 19 usft	**Longitude:**	104° 6' 5 964 W
Position Uncertainty:	0 00 usft	**Slot Radius:**	13-3/16"	**Grid Convergence:**	0 12 °

Well Devon "8" Fee#2H, Directional (Pathfinder)

Well Position	**+N/-S**	0 00 usft	**Northing:**	415,496.05 usft	**Latitude:**	32° 8' 31 574 N
	+E/-W	0 00 usft	**Easting:**	571,588 37 usft	**Longitude:**	104° 6' 7 351 W
Position Uncertainty		0 00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	0 00 usft

Wellbore VH - Job #32K0812998

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	08/12/12	7 68	59 99	48,417

Design VH - Job #32K0812998

Audit Notes:

Version:	1 0	**Phase:**	ACTUAL	**Tie On Depth:**	0.00

Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**
	0 00	0 00	0 00	331 29

Survey Program **Date** 10/08/12

From (usft)	**To (usft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
105 00	504 00	Gyro (VH - Job #32K0812998)	Keeper	Keeper Surface Readout

Survey

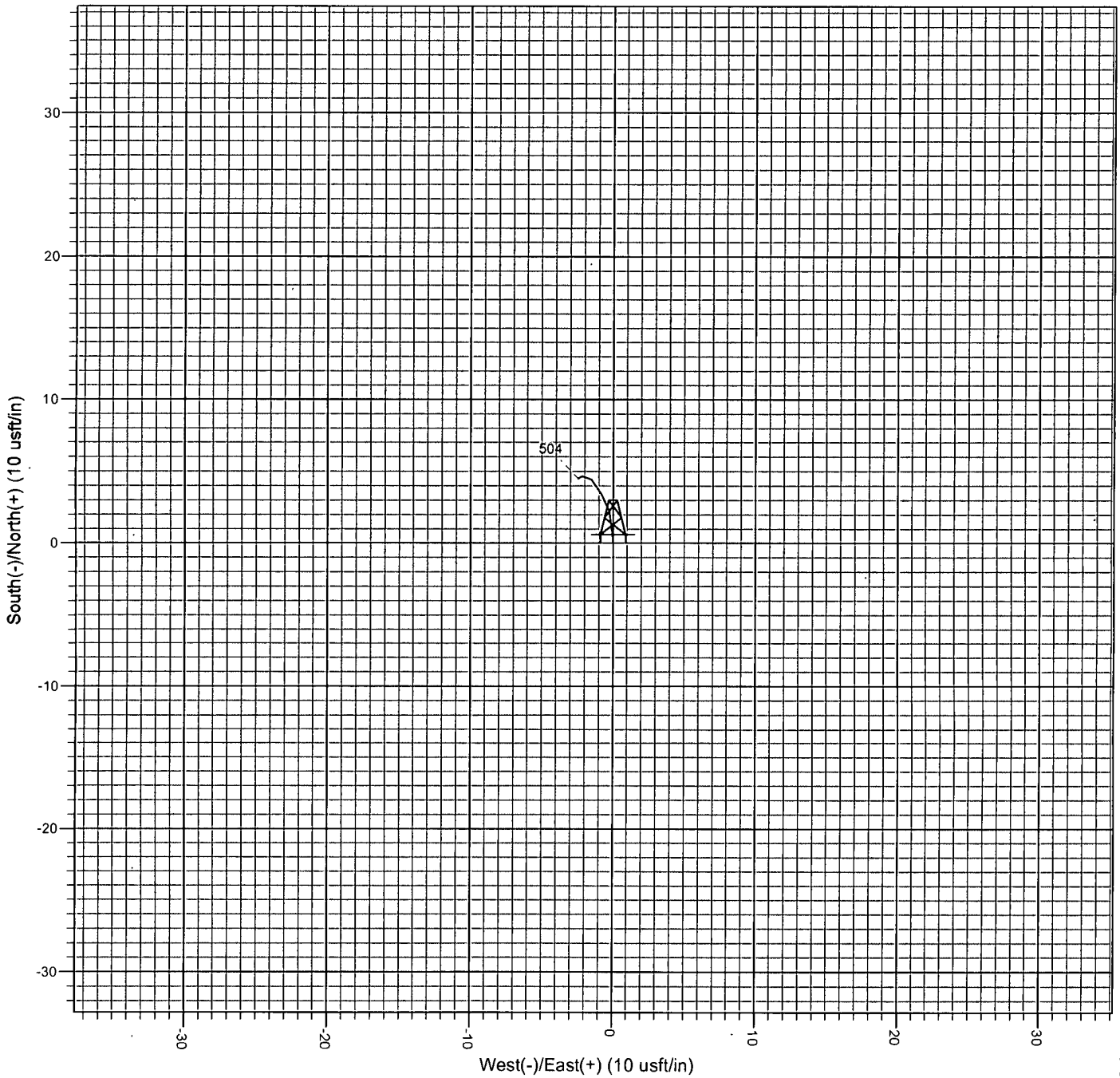
Measured Depth (usft)	**Inclination (°)**	**Azimuth (°)**	**True Vertical Depth**	**North/South (usft)**	**East/West (usft)**	**Closure Azimuth (°)**	**Closure Distance (usft)**
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
105 00	0 88	354 46	105 00	0 80	-0 08	354 46	0 81
200 00	0 84	349 06	199 99	2 21	-0 28	352 78	2 23
290 00	0 87	324 76	289 98	3 42	-0 80	346 83	3 51
382 00	0 66	325 58	381 97	4 43	-1 50	341 25	4.67
473 00	0 54	239 71	472.96	4 64	-2 17	334 95	5 12
504 00	0 67	242 73	503 96	4 49	-2 46	331 29	5 11

Scientific Drilling

Project: Hay Hollow Bone Spring
Eddy County, NM
Well: Devon "8" Fee#2H
Wellbore: VH - Job #32K0812998
Design: VH - Job #32K0812998

WELL DETAILS: Devon "8" Fee#2H
WELL @ 0.00usft (Original Well Elev)
Ground Level: 0.00

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	Slot
0.00	0.00	415496.05	571588.37	32° 8' 31.574 N	104° 6' 7.351 W	



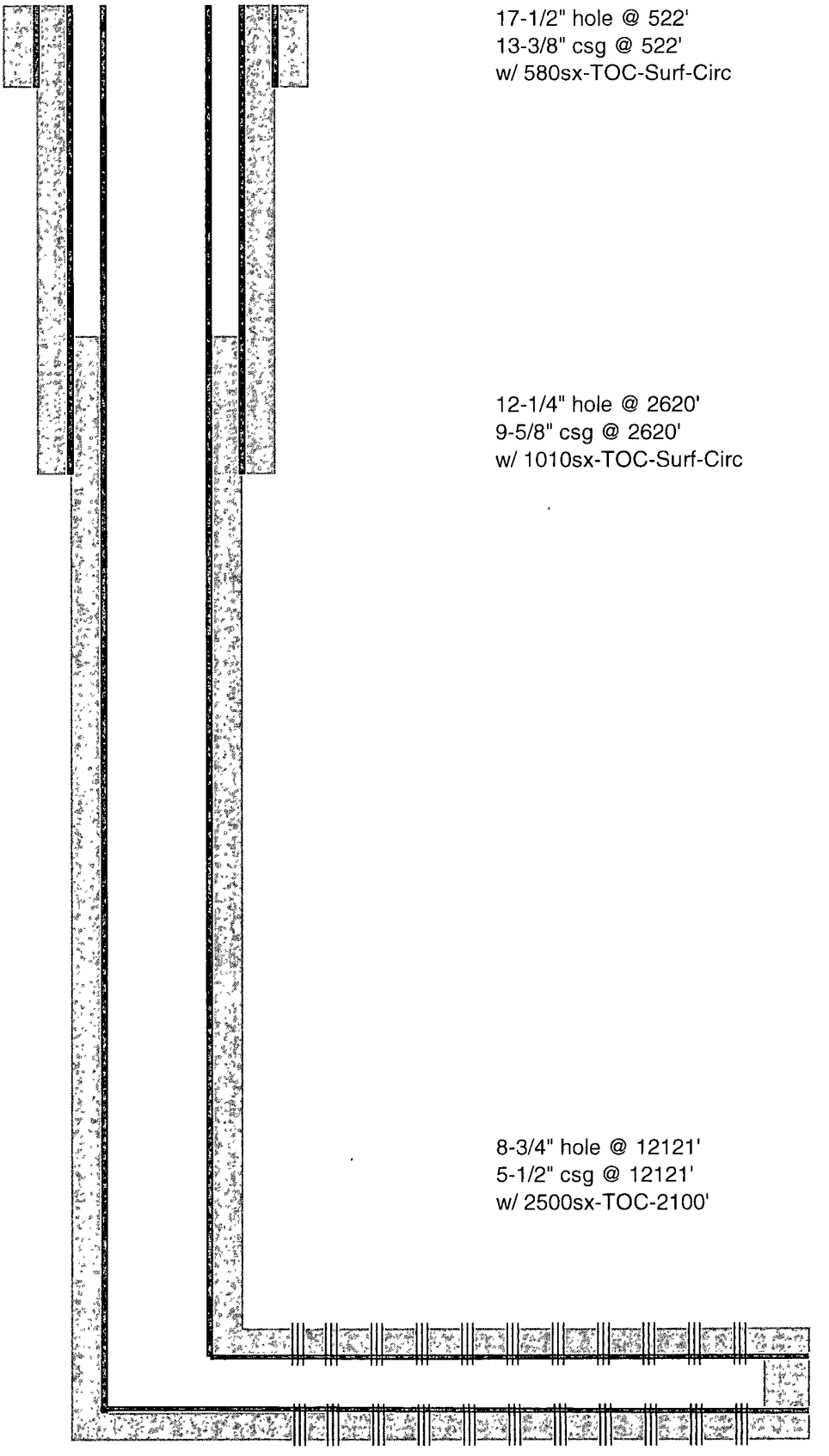
PROJECT DETAILS: Hay Hollow Bone Spring

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

SITE DETAILS: Eddy County, NM

Site Centre Latitude: 32° 8' 56.596 N
Longitude: 104° 6' 5.964 W
Positional Uncertainity: 0.00
Convergence: 0.12
Local North: Grid

Occidental Permian LP
Devon 8 Fee #2H
API No. 30-015-40347



17-1/2" hole @ 522'
13-3/8" csg @ 522'
w/ 580sx-TOC-Surf-Circ

12-1/4" hole @ 2620'
9-5/8" csg @ 2620'
w/ 1010sx-TOC-Surf-Circ

8-3/4" hole @ 12121'
5-1/2" csg @ 12121'
w/ 2500sx-TOC-2100'

Perfs @ 8230-11910'

TD- 12121'M 7957'V

Schlumberger

Survey Oxy Devon 8 Fee 2H Gyro+MWD 0ft to 12121ft Survey Geodetic Report

(Non-Def Survey)

Report Date:	September 05, 2012 - 09 34 AM	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	OXY	**Vertical Section Azimuth.**	270 390 ° (Grid North)
Field:	NM Eddy County (NAD 27)	**Vertical Section Origin:**	0 000 ft, 0 000 ft
Structure / Slot:	Oxy Devon 8 Fee 2H / Devon 8 Fee 2H	**TVD Reference Datum:**	Unknown
Well:	Devon 8 Fee 2H	**TVD Reference Elevation:**	3033 800 ft above MSL
Borehole:	Origianl Borehole	**Seabed / Ground Elevation:**	3008 800 ft above MSL
UWI / API#:	Unknown / Unknown	**Magnetic Declination:**	7 777 °
Survey Name:	Survey Oxy Devon 8 Fee 2H Gyro+MWD 0ft to 12121ft	**Total Gravity Field Strength:**	999 1952 mgn (9 8 based)
Survey Date:	June 27, 2012	**Total Magnetic Field Strength:**	48377 698 nT
Tort / AHD / DDI / ERD Ratio:	162 071 ° / 4542 069 ft / 6 048 / 0 569	**Magnetic Dip Angle:**	59 946 °
Coordinate Reference System:	NAD27 New Mexico State Plane, Eastern Zone, US Feet	**Declination Date:**	August 24, 2012
Location Lat / Long:	N 32° 8' 31 57392", W 104° 6' 7.35086"	**Magnetic Declination Model.**	BGGM 2012
Location Grid N/E Y/X:	N 415496 000 ftUS, E 571588 400 ftUS	**North Reference:**	Grid North
CRS Grid Convergence Angle:	0 1231 °	**Grid Convergence Used:**	0 1231 °
Grid Scale Factor:	0.99991496	**Total Corr Mag North->Grid North:**	7 6541 °
		Local Coord Referenced To:	Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Tie-In	0 00	0 00	0.00	0 00	-3033 80	0 00	0 00	0 00	N/A	415496 00	571588 40	N 32 8 31 57	W 104 6 7 35
Marker MudLine	*25.00*	*0.11*	*349 06*	*25.00*	*-3008.80*	*0 00*	*0 02*	*0.00*	*0 42*	*415496.02*	*571588 40*	*N 32 8 31 57*	*W 104 6 7.35*
	100 00	0 42	349 06	100 00	-2933.80	0.07	0 36	-0 07	0 42	415496 36	571588 33	N 32 8 31 58	W 104 6 7 35
	200 00	0.84	349 06	199 99	-2833 81	0 29	1.44	-0 28	0 42	415497 44	571588.12	N 32 8 31 59	W 104 6 7 35
	290 00	0 87	324 76	289 98	-2743 82	0 82	2.65	-0 80	0 40	415498 64	571587 60	N 32 8 31 60	W 104 6 7 36
	300 00	0 85	324 83	299 98	-2733 82	0 90	2 77	-0.88	0 23	415498 77	571587 52	N 32 8 31 60	W 104 6 7.36
	382 00	0 66	325 58	381 97	-2651 83	1 53	3 65	-1 50	0 23	415499 65	571586 90	N 32 8 31 61	W 104 6 7 37
	400 00	0.55	314 36	399 97	-2633 83	1 65	3 80	-1 62	0 90	415499 80	571586 78	N 32 8 31 61	W 104 6 7 37
	473 00	0 54	239 71	472 97	-2560 83	2.19	3 87	-2 17	0.90	415499 87	571586 23	N 32 8 31 61	W 104 6 7 38
	500 00	0 65	242 41	499 97	-2533 83	2 44	3 73	-2 41	0.43	415499 73	571585 99	N 32 8 31 61	W 104 6 7 38
	504 00	0 67	242.73	503 97	-2529 83	2.48	3 71	-2 45	0 43	415499 71	571585 95	N 32 8 31 61	W 104 6 7 38
	600 00	0 35	312 44	599 97	-2433 83	3 19	3 65	-3 17	0 67	415499 65	571585 23	N 32 8 31 61	W 104 6 7 39
	601 00	0 35	313 51	600 97	-2432 83	3 20	3 66	-3 17	0 67	415499 66	571585 23	N 32 8 31 61	W 104 6 7 39
	693 00	0 53	336 89	692.96	-2340 84	3 57	4 24	-3 54	0 27	415500 24	571584 86	N 32 8 31 62	W 104 6 7 39
	700 00	0 53	337 35	699.96	-2333 84	3 60	4 30	-3 57	0 06	415500 30	571584 83	N 32 8 31 62	W 104 6 7 39
	785 00	0 53	342 95	784 96	-2248 84	3 87	5 04	-3 84	0 06	415501 04	571584 56	N 32 8 31 62	W 104 6 7.40
	800 00	0 54	346 74	799 96	-2233 84	3 91	5.17	-3.87	0 24	415501 17	571584 53	N 32 8 31 63	W 104 6 7 40
	877 00	0 62	3 61	876 96	-2156 84	3 97	5 94	-3.93	0 24	415501 94	571584 47	N 32 8 31 63	W 104 6 7.40
	900 00	0 55	3 37	899 95	-2133 85	3 96	6 18	-3 91	0 30	415502 18	571584 49	N 32 8 31 64	W 104 6 7 40
	968 00	0 35	2.11	967 95	-2065 85	3 93	6 71	-3 89	0 30	415502 71	571584 51	N 32 8 31 64	W 104 6 7 40
	1000 00	0 35	358.69	999.95	-2033 85	3 93	6 91	-3 89	0 07	415502 91	571584 51	N 32 8 31 64	W 104 6 7 40
	1060 00	0 35	352 27	1059.95	-1973.85	3.96	7 27	-3 92	0 07	415503.27	571584.49	N 32 8 31 65	W 104 6 7 40
	1100 00	0 35	344 52	1099.95	-1933.85	4 01	7 51	-3 96	0 12	415503.51	571584.44	N 32 8 31 65	W 104 6 7 40
	1152.00	0 35	334 42	1151 95	-1881 85	4 13	7 80	-4 07	0 12	415503 80	571584.33	N 32 8 31 65	W 104 6 7 40
	1200 00	0 30	339 63	1199 95	-1833 85	4 24	8 05	-4 18	0 12	415504.05	571584.22	N 32 8 31 65	W 104 6 7 40
	1245 00	0 26	346 20	1244 95	-1788 85	4 30	8 26	-4.25	0 12	415504 26	571584 15	N 32 8 31 66	W 104 6 7 40
	1300 00	0 26	334 42	1299 95	-1733 85	4 39	8 50	-4.33	0 10	415504 50	571584 07	N 32 8 31 66	W 104 6 7 40
	1335 00	0 26	326 96	1334 95	-1698 85	4 47	8 63	-4.41	0 10	415504 63	571583 99	N 32 8 31.66	W 104 6 7 40
	1400 00	0 32	345 76	1399 95	-1633 85	4 59	8 93	-4.53	0 17	415504 93	571583 87	N 32 8 31.66	W 104 6 7.40
	1425 00	0 35	351.04	1424 95	-1608 85	4 62	9 08	-4.56	0 17	415505 08	571583 84	N 32 8 31 66	W 104 6 7.40

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	1500 00	0 37	7 72	1499 94	-1533.86	4 63	9 54	-4 56	0 14	415505 54	571583 84	N 32 8 31 67	W 104 6 7 40
	1600 00	0 44	25 63	1599 94	-1433 86	4 43	10 20	-4 36	0 14	415506.20	571584 04	N 32 8 31.67	W 104 6 7 40
	1605 00	0 44	26 37	1604 94	-1428 86	4 41	10.24	-4 34	0 14	415506 24	571584 06	N 32 8 31 68	W 104 6 7 40
	1700 00	0 96	55 10	1699.93	-1333 87	3 60	11 02	-3 52	0 65	415507 02	571584 88	N 32 8 31 68	W 104 6 7 39
	1785 00	1 49	62 40	1784 91	-1248 89	2 04	11 94	-1 96	0 65	415507 94	571586 44	N 32 8 31.69	W 104 6 7 37
	1800 00	1 51	63.89	1799 91	-1233.89	1.69	12 12	-1 61	0 28	415508 12	571586 79	N 32 8 31 69	W 104 6 7 37
	1900 00	1 65	72.88	1899 87	-1133 93	-0.86	13.12	0 95	0 28	415509 12	571589 35	N 32 8 31.70	W 104 6 7 34
	1965 00	1 76	77 87	1964 84	-1068 96	-2 72	13.61	2 82	0 28	415509 61	571591 22	N 32 8 31.71	W 104 6 7 32
	2000 00	1 72	76 09	1999 83	-1033 97	-3 76	13 85	3 85	0 19	415509 85	571592 25	N 32 8 31.71	W 104 6 7 31
	2100 00	1 62	70 56	2099 78	-934 02	-6 54	14 68	6 64	0 19	415510 68	571595 04	N 32 8 31 72	W 104 6 7 27
	2145 00	1 58	67 85	2144 77	-889 03	-7 72	15 12	7 82	0 19	415511 12	571596 22	N 32 8 31 72	W 104 6 7 26
	2200 00	1.13	76 07	2199 75	-834 05	-8 94	15.54	9 05	0 89	415511 54	571597 45	N 32 8 31 73	W 104 6 7 25
	2300.00	0 53	126 75	2299.74	-734 06	-10 27	15 50	10.37	0 89	415511 50	571598.77	N 32 8 31 73	W 104 6 7 23
	2324 00	0 53	150 03	2323 74	-710 06	-10 41	15 34	10 52	0 89	415511 34	571598 92	N 32 8 31 73	W 104 6 7 23
	2400.00	0 38	148 93	2399 74	-634 06	-10 72	14 82	10 82	0 20	415510.81	571599 22	N 32 8 31 72	W 104 6 7.22
	2500 00	0 19	144 84	2499 74	-534 06	-10 99	14 40	11 09	0 20	415510 39	571599 49	N 32 8 31 72	W 104 6 7 22
	2504 00	0 18	144 49	2503 74	-530 06	-11 00	14 39	11 10	0.20	415510 38	571599 50	N 32 8 31 72	W 104 6 7 22
	2571.00	0 26	150 29	2570 74	-463 06	-11 14	14 17	11 23	0 12	415510 17	571599 63	N 32 8 31 71	W 104 6 7 22
	2600 00	0 26	136 12	2599 74	-434.06	-11 22	14 06	11 31	0 22	415510 06	571599 71	N 32 8 31 71	W 104 6 7 22
	2683 00	0 35	104 77	2682 73	-351 07	-11 60	13 86	11.69	0 22	415509 86	571600 09	N 32 8 31.71	W 104 6 7 21
	2700 00	0 35	103 92	2699 73	-334 07	-11 70	13 83	11 79	0 03	415509 83	571600 19	N 32 8 31 71	W 104 6 7 21
	2774.00	0 35	100 20	2773 73	-260 07	-12 14	13 74	12 23	0 03	415509 74	571600 63	N 32 8 31 71	W 104 6 7 21
	2800 00	0 32	99 65	2799 73	-234 07	-12 29	13.71	12 38	0 10	415509 71	571600 78	N 32 8 31 71	W 104 6 7 21
	2864 00	0 26	97 82	2863.73	-170 07	-12 61	13 66	12 71	0.10	415509 66	571601 10	N 32 8 31 71	W 104 6 7 20
	2900 00	0 30	96.82	2899 73	-134 07	-12 79	13 64	12 88	0 10	415509 64	571601 28	N 32 8 31 71	W 104 6 7 20
	2954 00	0 35	95 71	2953 73	-80 07	-13 09	13.61	13.18	0 10	415509.61	571601 58	N 32 8 31.71	W 104 6 7.20
	3000 00	0 38	112 80	2999.73	-34 07	-13 37	13 53	13 46	0.25	415509.53	571601 86	N 32 8 31.71	W 104 6 7 19
	3043 00	0 44	125 42	3042 73	8 93	-13 64	13 38	13 73	0 25	415509 38	571602 13	N 32 8 31 71	W 104 6 7 19
	3100.00	0 38	126 33	3099 73	65 93	-13 97	13 14	14 06	0 10	415509 14	571602 46	N 32 8 31 70	W 104 6 7 19
	3133 00	0 35	127 00	3132 73	98 93	-14 14	13 02	14 23	0 10	415509 02	571602 63	N 32 8 31 70	W 104 6 7 19
	3200.00	0 41	139 45	3199.72	165 92	-14 47	12 71	14 55	0 16	415508 71	571602 95	N 32 8 31 70	W 104 6 7 18
	3223 00	0 44	142 82	3222 72	188 92	-14 57	12 58	14 66	0 16	415508.58	571603 06	N 32 8 31 70	W 104 6 7 18
	3300 00	0 21	159 11	3299 72	265 92	-14 81	12 21	14 89	0 32	415508 21	571603 29	N 32 8 31 69	W 104 6 7 18
	3312 00	0 18	165 24	3311.72	277 92	-14.82	12 17	14 90	0 32	415508 17	571603 30	N 32 8 31 69	W 104 6 7 18
	3400 00	0 26	177 78	3399 72	365 92	-14 86	11 84	14 95	0 10	415507 84	571603 34	N 32 8 31 69	W 104 6 7 18
	3402 00	0 26	177 98	3401 72	367 92	-14.86	11 83	14 95	0 10	415507 83	571603 34	N 32 8 31 69	W 104 6 7 18
	3491 00	0 18	190 02	3490 72	456 92	-14.85	11 49	14 93	0 10	415507 49	571603 33	N 32 8 31.69	W 104 6 7 18
	3500 00	0 18	188 38	3499.72	465 92	-14 85	11 46	14 92	0 06	415507 46	571603 32	N 32 8 31 69	W 104 6 7 18
	3582 00	0 18	173 23	3581 72	547 92	-14 84	11 21	14.92	0 06	415507 21	571603 32	N 32 8 31 68	W 104 6 7 18
	3600 00	0 18	172 35	3599 72	565 92	-14 85	11 15	14 93	0 02	415507 15	571603.33	N 32 8 31 68	W 104 6 7 18
	3672 00	0 18	168 84	3671.72	637 92	-14.89	10 93	14 96	0 02	415506.93	571603 36	N 32 8 31 68	W 104 6 7 18
	3700 00	0 18	165 32	3699 72	665 92	-14.91	10.84	14 98	0 04	415506 84	571603 38	N 32 8 31 68	W 104 6 7 18
	3762 00	0 18	157.50	3761 72	727 92	-14.97	10 66	15 05	0 04	415506 66	571603 44	N 32 8 31 68	W 104 6 7 18
	3800 00	0 21	169.69	3799 72	765 92	-15 01	10 53	15 08	0 13	415506 53	571603.48	N 32 8 31 68	W 104 6 7 18
	3852.00	0 26	181 23	3851 72	817 92	-15 03	10 32	15 10	0 13	415506 32	571603.49	N 32 8 31 68	W 104 6 7 18
	3900 00	0 30	194 15	3899 72	865 92	-14 99	10.09	15.06	0.16	415506 09	571603 46	N 32 8 31.67	W 104 6 7 18
	3942.00	0 35	202 50	3941 72	907 92	-14 92	9 87	14 99	0 16	415505 86	571603 38	N 32 8 31 67	W 104 6 7 18
	4000 00	0 35	208 33	3999 72	965 92	-14 77	9 55	14 83	0 06	415505 55	571603 23	N 32 8 31 67	W 104 6 7 18
	4032 00	0 35	211 55	4031 72	997 92	-14 67	9 38	14 74	0 06	415505 38	571603 14	N 32 8 31 67	W 104 6 7 18
	4100 00	0 42	212 88	4099.71	1065 91	-14 43	8 99	14 49	0 10	415504 99	571602 89	N 32 8 31 66	W 104 6 7 18
	4122 00	0 44	213.22	4121 71	1087 91	-14 34	8.85	14 40	0.10	415504.85	571602 80	N 32 8 31 66	W 104 6 7 18
	4200 00	0 52	207 35	4199 71	1165 91	-14 02	8 29	14 08	0 12	415504.29	571602 48	N 32 8 31.66	W 104 6 7 19
	4213 00	0.53	206 54	4212 71	1178 91	-13 97	8 18	14.02	0 12	415504 18	571602 42	N 32 8 31 65	W 104 6 7.19

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	4300 00	0 44	198 36	4299 71	1265 91	-13.69	7 51	13 74	0 13	415503 50	571602 14	N 32 8 31 65	W 104 6 7 19
	4303 00	0 44	198 02	4302 71	1268 91	-13 68	7 48	13 73	0.13	415503 48	571602 13	N 32 8 31 65	W 104 6 7 19
	4393 00	0 44	197 05	4392 70	1358 90	-13 48	6 82	13 52	0 01	415502 82	571601 92	N 32 8 31.64	W 104 6 7 19
	4400 00	0 44	197 84	4399 70	1365 90	-13 46	6 77	13 51	0.09	415502 77	571601 91	N 32 8 31 64	W 104 6 7 19
	4483 00	0 44	207 25	4482 70	1448 90	-13.22	6 19	13 26	0 09	415502 19	571601 66	N 32 8 31 63	W 104 6 7 20
	4500 00	0 42	208 25	4499 70	1465 90	-13.16	6 07	13 20	0 11	415502 07	571601 60	N 32 8 31 63	W 104 6 7 20
	4573 00	0 35	213 66	4572 70	1538 90	-12.91	5 65	12 95	0 11	415501 65	571601 35	N 32 8 31 63	W 104 6 7 20
	4600 00	0 37	204 01	4599 70	1565 90	-12 83	5 50	12 87	0 23	415501 50	571601 27	N 32 8 31 63	W 104 6 7 20
	4663 00	0 44	185 89	4662.70	1628.90	-12 73	5 08	12 77	0 23	415501 08	571601 16	N 32 8 31 62	W 104 6 7 20
	4700 00	0.44	187 59	4699 70	1665.90	-12 70	4.80	12 73	0.04	415500 80	571601 13	N 32 8 31 62	W 104 6 7 20
	4753 00	0.44	190 02	4752 70	1718 90	-12 64	4.39	12 67	0 04	415500 39	571601 07	N 32 8 31 62	W 104 6 7 20
	4800 00	0 43	199 20	4799 69	1765 89	-12 55	4 05	12 58	0 15	415500 05	571600 98	N 32 8 31 61	W 104 6 7 20
	4843 00	0 44	207 60	4842 69	1808 89	-12 42	3 75	12 45	0 15	415499 75	571600 85	N 32 8 31 61	W 104 6 7 21
	4900 00	0 43	222.26	4899 69	1865 89	-12 18	3 40	12.20	0 20	415499 40	571600 60	N 32 8 31 61	W 104 6 7 21
	4943.00	0 44	233.26	4942 69	1908 89	-11 94	3 18	11 96	0.20	415499 18	571600 36	N 32 8 31 61	W 104 6 7 21
	5000.00	0 44	223 48	4999.69	1965 89	-11 62	2 89	11 64	0 13	415498 89	571600 04	N 32 8 31 60	W 104 6 7 22
	5023 00	0 44	219 55	5022 69	1988 89	-11 50	2 76	11 52	0 13	415498 76	571599 92	N 32 8 31 60	W 104 6 7 22
	5100 00	0 44	218 73	5099.69	2065 89	-11 13	2 30	11 15	0 01	415498 30	571599 55	N 32 8 31 60	W 104 6 7 22
	5113 00	0 44	218 59	5112 68	2078 88	-11 07	2 22	11 09	0 01	415498 22	571599 49	N 32 8 31 60	W 104 6 7 22
	5200 00	0 53	220.54	5199 68	2165 88	-10 61	1 66	10 62	0 10	415497 66	571599 02	N 32 8 31 59	W 104 6 7 23
	5204 00	0 53	220.61	5203 68	2169 88	-10 58	1 63	10 59	0 10	415497 63	571598 99	N 32 8 31 59	W 104 6 7 23
	5294 00	0 44	226 14	5293.68	2259 88	-10.07	1 07	10 07	0 11	415497.07	571598.47	N 32 8 31.58	W 104 6 7 23
	5300 00	0 45	225 62	5299 68	2265.88	-10 03	1 04	10 04	0 21	415497 04	571598 44	N 32 8 31 58	W 104 6 7 23
	5384 00	0 62	220 43	5383 67	2349 87	-9 51	0 46	9 51	0 21	415496 46	571597 91	N 32 8 31 58	W 104 6 7 24
	5400 00	0.63	218 06	5399 67	2365 87	-9 40	0 33	9 40	0.18	415496 33	571597 80	N 32 8 31 58	W 104 6 7.24
	5474 00	0.70	208 30	5473 67	2439 87	-8 94	-0 39	8 93	0.18	415495 61	571597.33	N 32 8 31 57	W 104 6 7 25
	5500 00	0.72	205.57	5499 67	2465 87	-8 79	-0 68	8 79	0 16	415495 32	571597 19	N 32 8 31 57	W 104 6 7 25
	5564.00	0 79	199 60	5563 66	2529.86	-8 47	-1 46	8 46	0 16	415494 54	571596 86	N 32 8 31 56	W 104 6 7 25
	5600 00	0.83	201 55	5599 66	2565 86	-8 30	-1.94	8 29	0.12	415494 06	571596 69	N 32 8 31 55	W 104 6 7 25
	5654 00	0.88	204 17	5653 65	2619 85	-7 99	-2 68	7 97	0.12	415493 32	571596 37	N 32 8 31 55	W 104 6 7 26
	5700 00	0 97	200 30	5699 65	2665 85	-7 72	-3 36	7 69	0 24	415492 64	571596.09	N 32 8 31 54	W 104 6 7 26
	5744 00	1 06	197 23	5743 64	2709 84	-7 47	-4 10	7 44	0.24	415491 90	571595 84	N 32 8 31 53	W 104 6 7.26
	5800.00	0.94	189.36	5799 63	2765 83	-7.25	-5 05	7 22	0 32	415490.95	571595 61	N 32 8 31 52	W 104 6 7 27
	5834 00	0 88	183.61	5833 63	2799 83	-7 19	-5 59	7.15	0 32	415490 41	571595 55	N 32 8 31 52	W 104 6 7 27
	5900 00	0 88	186.64	5899 62	2865 82	-7 11	-6 60	7 06	0.07	415489 41	571595.46	N 32 8 31 51	W 104 6 7 27
	5924 00	0.88	187 74	5923 62	2889 82	-7 06	-6.96	7 02	0 07	415489 04	571595.42	N 32 8 31 50	W 104 6 7 27
	6000.00	0 88	194 72	5999 61	2965 81	-6 85	-8.10	6 79	0 14	415487 90	571595.19	N 32 8 31 49	W 104 6 7 27
	6015 00	0 88	196 09	6014 60	2980 80	-6 79	-8 32	6 73	0 14	415487.68	571595 13	N 32 8 31 49	W 104 6 7 27
	6100 00	0 88	200 07	6099 59	3065 79	-6 39	-9 56	6 32	0 07	415486.44	571594 72	N 32 8 31 48	W 104 6 7 28
	6105.00	0 88	200 30	6104.59	3070 79	-6.36	-9 64	6 30	0 07	415486 36	571594 70	N 32 8 31 48	W 104 6 7 28
	6194.00	1 58	246.45	6193 57	3159 77	-5.01	-10 77	4 94	1 30	415485 23	571593 34	N 32 8 31 47	W 104 6 7 29
	6200 00	1 59	247 22	6199 57	3165 77	-4 86	-10 83	4 78	0 39	415485 17	571593 18	N 32 8 31 47	W 104 6 7 30
	6284.00	1 76	256 99	6283 54	3249 74	-2 53	-11.58	2 45	0.39	415484 43	571590 85	N 32 8 31 46	W 104 6 7 32
	6300 00	1 79	258 25	6299.53	3265 73	-2 05	-11 68	1 97	0 30	415484 32	571590.37	N 32 8 31 46	W 104 6 7 33
	6374 00	1 93	263 59	6373 49	3339 69	0 32	-12 06	-0 40	0 30	415483 95	571588 00	N 32 8 31 45	W 104 6 7 36
	6400 00	1 98	266 15	6399 48	3365 68	1 20	-12 13	-1 28	0 38	415483 87	571587 12	N 32 8 31 45	W 104 6 7 37
	6464 00	2 11	271 93	6463.43	3429 63	3 48	-12 17	-3.56	0 38	415483 83	571584 84	N 32 8 31 45	W 104 6 7 39
	6500 00	2 14	273.41	6499 41	3465 61	4.82	-12 11	-4 90	0 18	415483 89	571583 50	N 32 8 31.45	W 104 6 7 41
	6554 00	2.20	275 54	6553 37	3519.57	6 86	-11 95	-6 94	0.18	415484 05	571581 46	N 32 8 31.46	W 104 6 7 43
	6600 00	2 06	276 80	6599 34	3565 54	8 56	-11 76	-8 64	0.32	415484 24	571579 76	N 32 8 31.46	W 104 6 7 45
	6644 00	1 93	278 17	6643 31	3609 51	10 08	-11 56	-10 16	0 32	415484.44	571578 24	N 32 8 31 46	W 104 6 7 47
	6700 00	1 65	272 86	6699 28	3665 48	11 82	-11 39	-11 90	0 58	415484.61	571576.50	N 32 8 31 46	W 104 6 7 49
	6734.00	1 49	268 68	6733 27	3699 47	12 75	-11 38	-12 83	0 58	415484 63	571575.57	N 32 8 31 46	W 104 6 7 50

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	6800.00	1 22	258 78	6799 25	3765 45	14 30	-11 53	-14 38	0 54	415484.47	571574 02	N 32 8 31 46	W 104 6 7.52
	6824 00	1.14	254 09	6823 25	3789 45	14 78	-11 65	-14 86	0 54	415484 35	571573 54	N 32 8 31 46	W 104 6 7 52
	6900 00	0 92	254 16	6899 24	3865 44	16.09	-12 02	-16 17	0 29	415483 98	571572 23	N 32 8 31 46	W 104 6 7 54
	6914 00	0 88	254 18	6913 23	3879 43	16 30	-12 08	-16 38	0.29	415483 92	571572 02	N 32 8 31.45	W 104 6 7 54
	7000 00	1 12	284 01	6999 22	3965.42	17 75	-12 06	-17 84	0 66	415483 94	571570 56	N 32 8 31 45	W 104 6 7 56
Last Scientific Survey	7004 00	1 14	285 03	7003 22	3969 42	17 83	-12 04	-17 91	0.66	415483 96	571570 49	N 32 8 31 46	W 104 6 7 56
	7073 00	3 17	266 57	7072.17	4038 37	20 40	-11 97	-20 48	3 07	415484 03	571567 92	N 32 8 31 46	W 104 6 7 59
	7100.00	4 59	261.48	7099.11	4065 31	22 21	-12.18	-22 29	5 39	415483.82	571566 11	N 32 8 31 45	W 104 6 7 61
	7118 00	5 54	259.54	7117.04	4083 24	23 77	-12 44	-23 86	5 39	415483 56	571564 54	N 32 8 31 45	W 104 6 7 63
	7162.00	7.65	255 94	7160 74	4126 94	28 70	-13.54	-28 79	4 88	415482 46	571559 61	N 32 8 31 44	W 104 6 7 69
	7200.00	7 36	256 01	7198 42	4164 62	33 50	-14 74	-33 61	0 76	415481 26	571554 80	N 32 8 31 43	W 104 6 7 74
	7208.00	7 30	256 03	7206 35	4172 55	34 49	-14 99	-34 60	0 76	415481 01	571553.81	N 32 8 31 43	W 104 6 7 75
	7253 00	8 44	258 49	7250 93	4217 13	40.49	-16 34	-40 61	2 64	415479 66	571547.80	N 32 8 31.41	W 104 6 7 82
	7298 00	11 43	265 87	7295 25	4261 45	48.17	-17 32	-48 29	7 21	415478.68	571540 11	N 32 8 31.40	W 104 6 7 91
	7300 00	11 49	265 87	7297.21	4263.41	48 57	-17 35	-48 69	3 13	415478 65	571539 72	N 32 8 31 40	W 104 6 7.92
	7343 00	12 84	265 78	7339 24	4305 44	57 60	-18 01	-57.73	3.13	415477.99	571530 68	N 32 8 31 40	W 104 6 8 02
	7388 00	15.30	262 18	7382 89	4349 09	68 46	-19.18	-68 60	5 80	415476 82	571519 81	N 32 8 31 39	W 104 6 8 15
	7400 00	15 52	260 57	7394.46	4360.66	71 61	-19 66	-71 75	4 00	415476 34	571516.66	N 32 8 31.38	W 104 6 8 19
	7433 00	16 18	256 38	7426 21	4392 41	80 43	-21 47	-80 57	4 00	415474 53	571507 83	N 32 8 31 36	W 104 6 8 29
	7478 00	19 26	255 76	7469 07	4435.27	93 69	-24 77	-93 86	6 86	415471 23	571494 54	N 32 8 31 33	W 104 6 8 44
	7500 00	20 63	256 54	7489.74	4455.94	100 97	-26 57	-101 15	6.35	415469 44	571487 26	N 32 8 31 31	W 104 6 8.53
	7523 00	22.07	257.26	7511.17	4477 37	109 11	-28 46	-109.31	6.35	415467 54	571479 10	N 32 8 31 29	W 104 6 8 62
	7568 00	24 71	260 16	7552 47	4518 67	126 60	-31 93	-126 82	6 40	415464 07	571461 59	N 32 8 31 26	W 104 6 8 83
	7600 00	27.27	260 61	7581 23	4547 43	140 41	-34.27	-140.65	8 02	415461 73	571447 76	N 32 8 31 24	W 104 6 8 99
	7613.00	28 31	260 77	7592 73	4558 93	146 39	-35 25	-146 63	8 02	415460.75	571441 78	N 32 8 31 23	W 104 6 9 06
	7658.00	29 02	265 17	7632 22	4598 42	167.78	-37 89	-168 04	4 95	415458 12	571420 37	N 32 8 31 20	W 104 6 9.31
	7700 00	29 50	271 57	7668 87	4635 07	188 27	-38 46	-188 54	7.53	415457 54	571399 88	N 32 8 31.20	W 104 6 9.54
	7703 00	29 55	272 02	7671.48	4637.68	189 75	-38 41	-190 01	7 53	415457 59	571398 40	N 32 8 31.20	W 104 6 9 56
	7748 00	30 34	272 64	7710 47	4676 67	212.20	-37.50	-212 46	1 89	415458 50	571375 96	N 32 8 31 21	W 104 6 9 82
	7793 00	29 99	270 08	7749 38	4715 58	234 80	-36 96	-235 06	2 96	415459 04	571353 36	N 32 8 31 21	W 104 6 10 09
	7800 00	30 51	270 20	7755 42	4721 62	238 33	-36.95	-238 58	7 47	415459 05	571349 84	N 32 8 31 21	W 104 6 10 13
	7838 00	33 33	270 81	7787 67	4753 87	258.42	-36.77	-258 67	7 47	415459.23	571329 75	N 32 8 31 22	W 104 6 10 36
	7883 00	38 43	271 83	7824 12	4790 32	284.78	-36 15	-285 03	11 41	415459.86	571303 39	N 32 8 31 22	W 104 6 10 67
	7900.00	40 92	271 76	7837 21	4803 41	295 63	-35 81	-295 88	14 65	415460 20	571292 55	N 32 8 31 23	W 104 6 10.79
	7928 00	45 02	271 66	7857 69	4823 89	314 70	-35 24	-314 95	14.65	415460 76	571273 48	N 32 8 31 23	W 104 6 11 01
	7973 00	51.09	270 69	7887 76	4853 96	348 15	-34 57	-348 40	13 58	415461 44	571240 03	N 32 8 31 24	W 104 6 11 40
	8000 00	54.52	270 84	7904 08	4870 28	369 66	-34 28	-369.90	12 72	415461 72	571218 53	N 32 8 31 24	W 104 6 11 65
	8018 00	56.81	270 93	7914 23	4880 43	384 52	-34 05	-384 76	12 72	415461 95	571203 67	N 32 8 31.25	W 104 6 11 83
	8063 00	62 87	270.89	7936 83	4903 03	423 41	-33 43	-423.65	13 47	415462.57	571164.79	N 32 8 31 25	W 104 6 12 28
	8100 00	67 93	270 55	7952.22	4918.42	457 04	-33 01	-457 27	13 71	415462 99	571131 17	N 32 8 31 26	W 104 6 12 67
	8108 00	69 03	270 48	7955 16	4921 36	464 48	-32 94	-464 72	13 71	415463 06	571123 72	N 32 8 31 26	W 104 6 12 76
	8153 00	75 62	269 88	7968 81	4935 01	507 33	-32 81	-507 57	14 70	415463 19	571080 88	N 32 8 31 26	W 104 6 13 25
	8198 00	82.75	269 43	7977 25	4943 45	551.50	-33 08	-551 74	15 87	415462 92	571036 71	N 32 8 31 26	W 104 6 13 77
	8200 00	82.96	269 41	7977 50	4943 70	553 49	-33 10	-553.72	10 79	415462 90	571034 72	N 32 8 31 26	W 104 6 13 79
	8289 00	92 51	268 33	7981 01	4947.21	642 28	-34 86	-642 53	10 79	415461 14	570945 92	N 32 8 31 24	W 104 6 14 82
	8300 00	92 34	268 34	7980 54	4946 74	653 26	-35 18	-653 52	1 57	415460 82	570934 94	N 32 8 31 24	W 104 6 14.95
	8379 00	91 10	268 42	7978 17	4944 37	732 18	-37 41	-732 45	1 57	415458 59	570856 01	N 32 8 31.22	W 104 6 15 87
	8400 00	91 28	268 40	7977.74	4943 94	753 16	-37 99	-753 44	0 88	415458 01	570835 03	N 32 8 31 21	W 104 6 16 11
	8469 00	91 89	268.33	7975 83	4942 03	822 09	-39 96	-822 38	0 88	415456 04	570766 09	N 32 8 31 20	W 104 6 16 92
	8500 00	92.07	268 39	7974 75	4940 95	853 05	-40 85	-853 35	0 62	415455 15	570735 12	N 32 8 31.19	W 104 6 17 28
	8559 00	92 42	268 51	7972 44	4938 64	911.97	-42 44	-912 28	0 62	415453 56	570676 20	N 32 8 31 17	W 104 6 17 96
	8600 00	92 18	268 95	7970 80	4937 00	952.92	-43 35	-953 24	1 22	415452 65	570635 24	N 32 8 31 17	W 104 6 18 44
	8649 00	91 89	269 47	7969 06	4935 26	1001 88	-44 03	-1002 21	1 22	415451 98	570586 28	N 32 8 31 16	W 104 6 19 01
	8700 00	91 84	269 72	7967 40	4933 60	1052 85	-44 39	-1053 18	0 50	415451 62	570535 31	N 32 8 31 16	W 104 6 19 60

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	8739.00	91.80	269 91	7966 16	4932 36	1091 83	-44 51	-1092 16	0 50	415451 49	570496 34	N 32 8 31 16	W 104 6 20 05
	8800 00	92 16	270 79	7964.05	4930 25	1152.79	-44 14	-1153 12	1.56	415451 86	570435 38	N 32 8 31 16	W 104 6 20 76
	8830 00	92 33	271 23	7962 88	4929 08	1182.77	-43 61	-1183.09	1 56	415452 39	570405 41	N 32 8 31 17	W 104 6 21 11
	8900 00	91 79	271 23	7960 37	4926 57	1252 71	-42 11	-1253 03	0 78	415453 90	570335 48	N 32 8 31 18	W 104 6 21 92
	8920 00	91 63	271 23	7959 77	4925 97	1272 70	-41 68	-1273 02	0 78	415454 32	570315 49	N 32 8 31 19	W 104 6 22 16
	9000 00	91 08	271 39	7957 88	4924 08	1352 67	-39 85	-1352 97	0 72	415456 15	570235 55	N 32 8 31 21	W 104 6 23 09
	9010 00	91 01	271 41	7957 70	4923.90	1362 67	-39 61	-1362.97	0 72	415456 40	570225 55	N 32 8 31 21	W 104 6 23 20
	9100 00	91 28	271 50	7955 90	4922 10	1452 63	-37 32	-1452 92	0 32	415458 68	570135 61	N 32 8 31 24	W 104 6 24 25
	9190 00	90 57	270 44	7954.45	4920 65	1542 61	-35.80	-1542 89	1 42	415460.20	570045 64	N 32 8 31 25	W 104 6 25 30
	9200.00	90 57	270 29	7954.35	4920 55	1552 61	-35 73	-1552 89	1 47	415460.27	570035 64	N 32 8 31 25	W 104 6 25 41
	9280 00	90 57	269 12	7953 55	4919 75	1632 60	-36 14	-1632 89	1 47	415459 86	569955 66	N 32 8 31 25	W 104 6 26 34
	9300 00	90 44	269 12	7953 37	4919.57	1652 60	-36 45	-1652 88	0.67	415459 55	569935 66	N 32 8 31 25	W 104 6 26 57
	9371 00	89 96	269 12	7953 13	4919.33	1723 58	-37 54	-1723 87	0 67	415458 46	569864 68	N 32 8 31 24	W 104 6 27 40
	9400 00	89 99	269 40	7953 14	4919.34	1752 57	-37 91	-1752 87	0 98	415458 09	569835 68	N 32 8 31 24	W 104 6 27 74
	9461 00	90.04	270 00	7953 13	4919 33	1813 57	-38 23	-1813 87	0 98	415457.77	569774 69	N 32 8 31.23	W 104 6 28 45
	9500 00	90.01	270 53	7953.11	4919 31	1852 57	-38 05	-1852 87	1 37	415457 95	569735 69	N 32 8 31 24	W 104 6 28 90
	9551 00	89 96	271 23	7953 13	4919 33	1903 57	-37 27	-1903 86	1 37	415458 74	569684 70	N 32 8 31 25	W 104 6 29 49
	9600 00	90.72	272 62	7952 84	4919 04	1952 55	-35 62	-1952 83	3 23	415460 38	569635 74	N 32 8 31 26	W 104 6 30 06
	9641 00	91 36	273 78	7952 09	4918 29	1993 49	-33 33	-1993.76	3 23	415462 67	569594.81	N 32 8 31 29	W 104 6 30 54
	9700 00	91 07	273 20	7950 84	4917 04	2052 39	-29 74	-2052 64	1 09	415466 26	569535.94	N 32 8 31 32	W 104 6 31 22
	9731 00	90 92	272 90	7950 30	4916 50	2083.35	-28 09	-2083 59	1 09	415467 91	569504 99	N 32 8 31 34	W 104 6 31 58
	9800 00	89.72	272 44	7949 92	4916 12	2152 29	-24 88	-2152 51	1.86	415471 12	569436 07	N 32 8 31 37	W 104 6 32 39
	9822 00	89 34	272 29	7950 10	4916 30	2174 28	-23 97	-2174 49	1.86	415472 03	569414 10	N 32 8 31.38	W 104 6 32 64
	9900 00	90 48	271 91	7950 22	4916 42	2252 24	-21 11	-2252 44	1 55	415474 89	569336.16	N 32 8 31 41	W 104 6 33.55
	9912 00	90 66	271 85	7950 10	4916 30	2264 24	-20 72	-2264.43	1 55	415475.28	569324 16	N 32 8 31 42	W 104 6 33 69
	10000 00	91 00	272 53	7948 82	4915 02	2352 19	-17 36	-2352 36	0 87	415478 65	569236 25	N 32 8 31 45	W 104 6 34 71
	10002 00	91 01	272 55	7948 78	4914 98	2354 18	-17 27	-2354.36	0.87	415478 74	569234 25	N 32 8 31 45	W 104 6 34 73
	10092 00	90 22	272 46	7947 82	4914.02	2444.12	-13 33	-2444 26	0 88	415482 67	569144 35	N 32 8 31 49	W 104 6 35 78
	10100 00	90 17	272 42	7947 79	4913.99	2452 11	-12 99	-2452 26	0 77	415483 01	569136 36	N 32 8 31 50	W 104 6 35 87
	10182 00	89 69	272 02	7947 89	4914.09	2534 07	-9 82	-2534 20	0 77	415486.19	569054 43	N 32 8 31 53	W 104 6 36 82
	10200 00	89 81	271 86	7947 97	4914 17	2552 06	-9 21	-2552.18	1 12	415486 80	569036 44	N 32 8 31 54	W 104 6 37 03
	10272 00	90.31	271 23	7947 89	4914 09	2624 05	-7 26	-2624 16	1 12	415488 74	568964 47	N 32 8 31 56	W 104 6 37 87
	10300 00	90 34	270 66	7947.73	4913 93	2652 05	-6 80	-2652 15	2 05	415489 20	568936 48	N 32 8 31 56	W 104 6 38 20
	10362 00	90 40	269 39	7947.33	4913 53	2714 04	-6 78	-2714.15	2 05	415489 22	568874 49	N 32 8 31 56	W 104 6 38 92
	10400.00	90 32	269 50	7947 09	4913 29	2752 04	-7 14	-2752 15	0 35	415488 86	568836 49	N 32 8 31 56	W 104 6 39.36
	10452 00	90 22	269 65	7946 84	4913 04	2804.03	-7 53	-2804.15	0 35	415488.47	568784 50	N 32 8 31 56	W 104 6 39 96
	10500 00	89 70	269 88	7946 88	4913 08	2852 03	-7 73	-2852.15	1 18	415488 28	568736 50	N 32 8 31 56	W 104 6 40 52
	10542 00	89.25	270 09	7947 26	4913 46	2894 02	-7 73	-2894 14	1 18	415488 27	568694 51	N 32 8 31 56	W 104 6 41 01
	10600 00	89 60	269 86	7947.84	4914.04	2952.02	-7 76	-2952 14	0 71	415488 24	568636 52	N 32 8 31 56	W 104 6 41 68
	10631 00	89 78	269 74	7948 01	4914 21	2983 02	-7 87	-2983 14	0 71	415488 13	568605 52	N 32 8 31 56	W 104 6 42 04
	10700.00	90 25	270.94	7948 00	4914.20	3052 02	-7 46	-3052 14	1.87	415488 54	568536 53	N 32 8 31.56	W 104 6 42 85
	10722 00	90 40	271 32	7947 87	4914 07	3074 01	-7 02	-3074 13	1 87	415488 98	568514 53	N 32 8 31.57	W 104 6 43 10
	10800 00	89 86	270 10	7947 69	4913 89	3152 01	-6 06	-3152 13	1 71	415489 94	568436 55	N 32 8 31 58	W 104 6 44 01
	10812 00	89 78	269 91	7947.73	4913 93	3164 01	-6 06	-3164 13	1 71	415489 94	568424 55	N 32 8 31 58	W 104 6 44 15
	10900 00	90 12	269 91	7947.80	4914 00	3252.01	-6 20	-3252 12	0 39	415489 80	568336 56	N 32 8 31 58	W 104 6 45 17
	10902 00	90 13	269 91	7947 80	4914 00	3254 01	-6 20	-3254 12	0 39	415489.80	568334 56	N 32 8 31 58	W 104 6 45 20
	10992.00	89.96	270.18	7947 73	4913 93	3344 01	-6 13	-3344 12	0 35	415489 87	568244 57	N 32 8 31.58	W 104 6 46 24
	11000.00	89 90	270.30	7947 74	4913 94	3352 01	-6 10	-3352 12	1 62	415489 90	568236.57	N 32 8 31 58	W 104 6 46.34
	11082 00	89 34	271 50	7948 28	4914 48	3434 00	-4 81	-3434.11	1 62	415491 19	568154.59	N 32 8 31 60	W 104 6 47 29
	11100 00	89 50	271 45	7948 46	4914 66	3451 99	-4 35	-3452 10	0 93	415491 65	568136 60	N 32 8 31 60	W 104 6 47 50
	11172 00	90.13	271 23	7948.70	4914.90	3523 98	-2 67	-3524 08	0 93	415493 33	568064 62	N 32 8 31 62	W 104 6 48 34
	11200 00	90 16	271 42	7948 62	4914 82	3551.98	-2.02	-3552 08	0 70	415493 98	568036 63	N 32 8 31 63	W 104 6 48 66
	11262 00	90 22	271 85	7948 42	4914 62	3613 96	-0 25	-3614 05	0 70	415495 75	567974 66	N 32 8 31 65	W 104 6 49 38

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	11300 00	90 75	271.66	7948 10	4914 30	3651 95	0 92	-3652 03	1.47	415496 92	567936 69	N 32 8 31 66	W 104 6 49.82
	11351 00	91 45	271 41	7947 12	4913 32	3702 93	2 28	-3703 00	1 47	415498.28	567885 72	N 32 8 31 67	W 104 6 50 42
	11400 00	91 02	271 12	7946 07	4912 27	3751 92	3 37	-3751 98	1 06	415499 37	567836 75	N 32 8 31 68	W 104 6 50 99
	11441 00	90 66	270 88	7945 47	4911 67	3792 91	4 08	-3792 97	1 06	415500 08	567795 76	N 32 8 31 69	W 104 6 51 46
	11500 00	90 03	271 00	7945 11	4911 31	3851 90	5 05	-3851 96	1 08	415501 05	567736 78	N 32 8 31.70	W 104 6 52 15
	11532 00	89 69	271 06	7945 19	4911 39	3883 90	5 62	-3883 95	1 08	415501 62	567704 78	N 32 8 31 71	W 104 6 52 52
	11600 00	90 82	270 86	7944 88	4911 08	3951 90	6 76	-3951 94	1 69	415502 76	567636 80	N 32 8 31 72	W 104 6 53 31
	11622 00	91 19	270 79	7944 50	4910 70	3973 89	7 08	-3973 94	1 69	415503.07	567614 81	N 32 8 31 73	W 104 6 53 57
	11700 00	90 51	270 11	7943 34	4909 54	4051 88	7 68	-4051 92	1 24	415503.68	567536 83	N 32 8 31 73	W 104 6 54 47
	11712 00	90 40	270 00	7943 25	4909 45	4063 88	7 70	-4063 92	1 24	415503.69	567524 83	N 32 8 31 73	W 104 6 54 61
	11800 00	91 26	269 75	7941 97	4908 17	4151 87	7 50	-4151 91	1.02	415503 50	567436 85	N 32 8 31 73	W 104 6 55 64
	11802 00	91 28	269 74	7941 93	4908 13	4153 87	7 49	-4153 91	1 02	415503 49	567434 85	N 32 8 31 73	W 104 6 55 66
	11893 00	91 98	268 68	7939 34	4905 54	4244.81	6 24	-4244 87	1 40	415502 24	567343 90	N 32 8 31 72	W 104 6 56 72
	11900 00	92.08	268 67	7939.09	4905 29	4251 80	6 08	-4251.86	1 40	415502 07	567336 91	N 32 8 31 72	W 104 6 56 80
	11982 00	93.21	268 51	7935 31	4901.51	4333 67	4.06	-4333 75	1 40	415500 06	567255 03	N 32 8 31 70	W 104 6 57 75
	12000 00	93 53	268 44	7934 25	4900 45	4351 63	3 58	-4351 71	1 80	415499.58	567237 07	N 32 8 31 70	W 104 6 57 96
Last Survey 5-Sep-2012	12052.00	94 44	268 24	7930 64	4896 84	4403 47	2 08	-4403 56	1 80	415498 08	567185 22	N 32 8 31 69	W 104 6 58 56
Proj to TD	12121.00	94 44	268.24	7925 30	4891 50	4472 22	-0 04	-4472 32	0 00	415495.96	567116 47	N 32 8 31 67	W 104 6 59.36

Survey Type: Non-Def Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95 000% Confidence 2 7955 sigma

Survey Program:

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)		Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	0 000	25 000		Act Stns	30 000	30 000	SLB_NSG+MSHOT-Depth Only	Original Borehole / Survey Oxy Devon 8 Fee 2H Gyro+MWD 0ft to 12121ft
	25 000	7000.000		Act Stns	30 000	30 000	SLB_NSG+MSHOT	Original Borehole / Survey Oxy Devon 8 Fee 2H Gyro+MWD 0ft
	7000 000	12052 000		Act Stns	30 000	30 000	SLB_MWD-STD	Original Borehole / Survey Oxy Devon 8 Fee 2H Gyro+MWD 0ft
	12052 000	12121 000		Act Stns	30 000	30 000	SLB_BLIND+TREND	Original Borehole / Survey Oxy Devon 8 Fee 2H Gyro+MWD 0ft

OXY

PATHFINDER
A Schlumberger Company

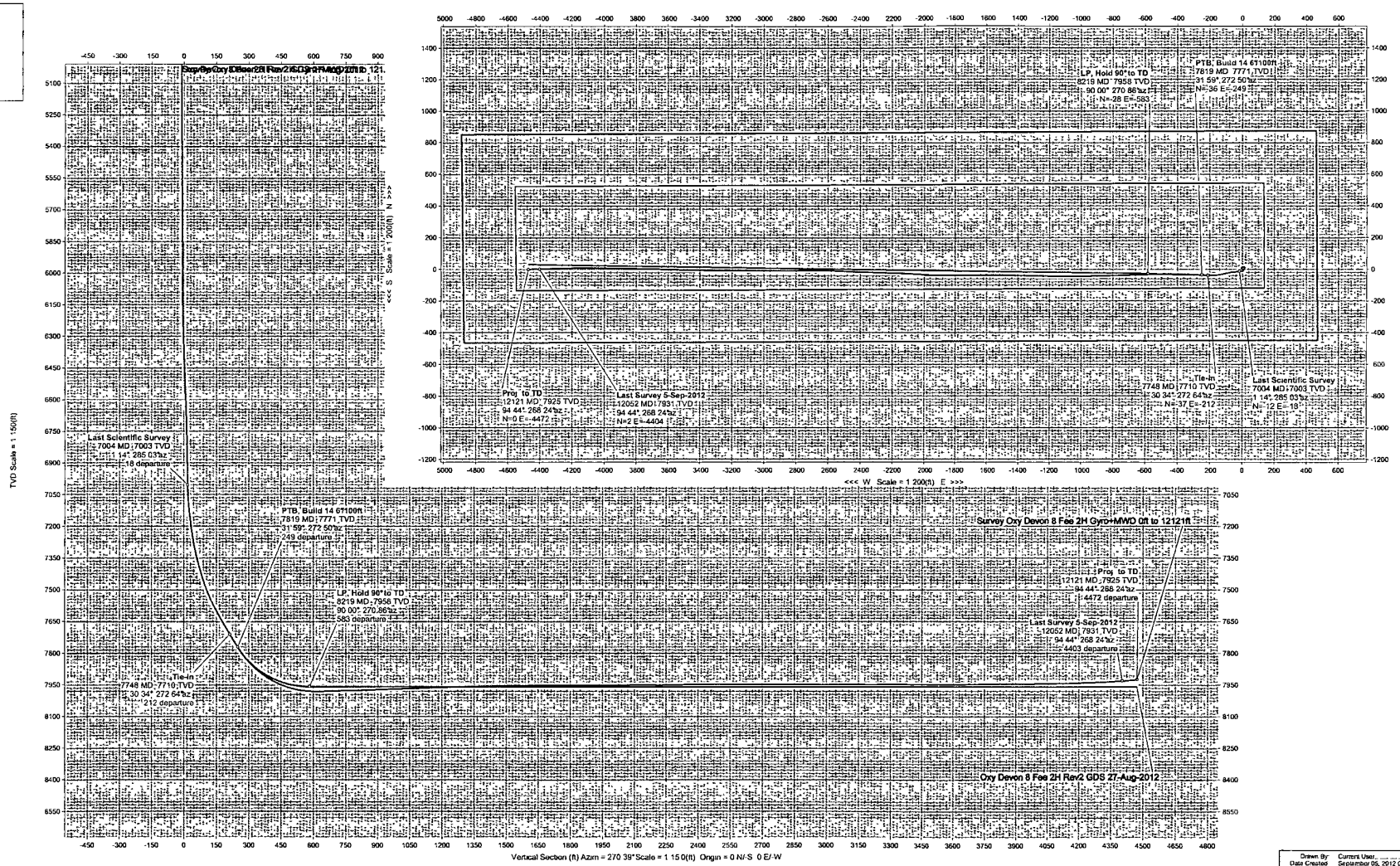
WELL	FIELD	STRUCTURE
Devon 8 Fee 2H	NM Eddy County (NAD 27)	Oxy Devon 8 Fee 2H

Magnetic Parameters				Surface Location				Miscellaneous			
Model: BGGM 2012	Dip: 59.946°	Date: August 24, 2012		Lat: N 32 8 31.534	Northing: 415496.00 ftUS	Grid Conv: 0.123°		Slot: Devon 8 Fee 2H	TVD Ref: Unknown(3033 ft above MSL)		
	Mag Dec: 7.777°	FS: 48377 TaT		Lon: W 104 6 7.351	Easting: 571588.40 ftUS	Scale Fact: 0.99991496		Plan: Survey Oxy Devon 8 Fee 2H Gyro+MWD 0ft to 12121ft_8012			

Legend

- Survey Oxy Devon 8 Fee 2H Gyro+MWD 0ft to 12121ft
- Oxy Devon 8 Fee 2H Rev2 GDS 27-Aug-2012
- Devon 8 Fee 2H Plan1
- Devon 8 Fee 2H Lateralline
- Devon 8 Fee 2H SHP Hardline

Grid North
Tot Corr (M-G) 7.654°
Mag Dec (7.777°)
Grid Conv (0.123°)



Drawn By:	Current User
Date Created	September 05, 2012 06:22:15 AM
Checked By:	
Checked Date	
Approved By:	
Approved Date	