

Results of Directional Survey

API number:	30-025-40095		
OGRID:		Operator:	OXY USA INC
		Property:	RUN RUNNER 2 FEDERAL COM # 1H

surface	ULSTR:	H	02	T	22S	R	32E
				1980	FNL	330	FEL

BH Loc	ULSTR:	E	02	T	22S	R	32E
13774	MD	9471.0	TVD	2033	FNL	336	FWL
						4944	FEL

Top Perf/OH	ULSTR:	H	02	T	22S	R	32E
9450	MD	9422.7	TVD	1628	FNL	287	FEL

Bot Perf/OH	ULSTR:	E	02	T	22S	R	32E
13624	MD	9461.5	TVD	2029	FNL	486	FWL
						4794	FEL

	MD	N/S	E/W	VD
	6627	336.90	27.00	6599.7
TOP PERFS/OH	9450	352.41	42.51	9422.70
	6718	337.40	27.50	6690.70
	13579	-48.25	-4418.93	9458.96
BOT PERFS/OH	13624	-49.02	-4463.85	9461.54
	13672	-49.84	-4511.76	9464.29

NEXT TO LAST	13737	-51.55	-4576.61	9468.42
LAST READING	13774	-52.53	-4613.51	9471.01
TD	13774	-52.53	-4613.51	9471.01

Surface Location	1980	FN	330	FE
Projected BHL	2033	FN	4944	FE
Location of				
Top Perfs/OH	1628	FN	287	FE
Bottom Perfs/OH	2029	FN	4794	FE

SUMMARY of Subsurface Locations

Surface Location	H-02-22S-32E	1980	FN	330	FE	Vert. Depth
Top Perfs/OH	H-02-22S-32E	1628	FN	287	FE	9422.70
Bottom Perfs/OH	E-02-22S-32E	2029	FN	4794	FE	9461.54
Projected TD	E-02-22S-32E	2033	FN	4944	FE	9471.01

APR 18 2012

OCCIDENTAL PERMIAN LTD.

Undesignated NW Bootleg Ridge Delaware

Lea County, NM

Rum Runner "2" Federal Com #1H

VH - Job #32K0711688

HOBBS OCD

FEB 13 2012

RECEIVED

Survey: Actual

SDI Standard Survey Report

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

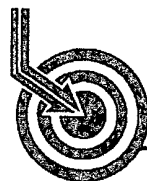
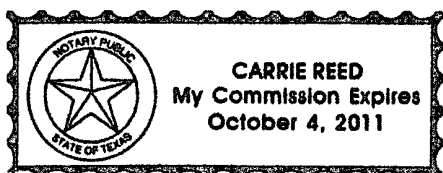
Shelton

Notarized this date 21st of September, 2011.

Carrie Reed

Notary Signature
County of Midland
State of Texas

SUR: H-02-22s-32e, 1980/N & 330/E
BHL: E-02-22s-32e, 2033/N & 4944/E
API # 30-025-40095



Scientific Drilling
Directional Drilling Operations

Scientific Drilling International, Inc.
SDI Standard Survey Report



Company:	OCCIDENTAL PERMIAN LTD	Local Co-ordinate Reference:	Well Rum Runner "2" Federal Com #1H
Project:	Undesignated NW Bootleg Ridge Delaware	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Lea County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Rum Runner "2" Federal Com #1H	North Reference:	Grd
Wellbore:	VH - Job #32K0711688	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K0711688	Database:	EDM-Regulatory

Project:	Undesignated NW Bootleg Ridge Delaware		
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:	Lea County, NM		
Site Position:		Northing:	518,124.18 usft
From:	Lat/Long	Easting:	714,702.69 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"
		Latitude:	32° 25' 21.055 N
		Longitude:	103° 38' 15.108 W
		Grid Convergence:	0.37 °

Well:	Rum Runner "2" Federal Com #1H Directional (Weatherford)		
Well Position	+N-S	0.0 usft	Northing: 518,124.18 usft
	+E-W	0.0 usft	Easting: 714,702.69 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 25' 21.055 N
		Longitude:	103° 38' 15.108 W
		Ground Level:	0.0 usft

Wellbore:	VH - Job #32K0711688				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/21/2011	7.60	60.35	48,728

Design:	VH - Job #32K0711688			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.0
Vertical Section	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)
	0.0	0.0	0.0	269.37

Survey Program	Date:	9/21/2011		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	4,550.0	Actual (VH - Job #32K0711688)	Keeper	Keeper Surface Readout

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.0
100.0	1.21	264.16	100.0	-0.1	-1.1	264.16	1.1
200.0	1.24	262.63	200.0	-0.4	-3.2	263.64	3.2
300.0	1.21	269.96	299.9	-0.5	-5.3	264.69	5.3
400.0	0.94	275.99	399.9	-0.4	-7.2	266.74	7.2
500.0	0.81	267.77	499.9	-0.4	-8.7	267.69	8.7
600.0	0.93	248.16	599.9	-0.7	-10.2	266.17	10.2
700.0	1.16	260.14	699.9	-1.2	-11.9	264.46	12.0
800.0	1.14	268.37	799.9	-1.4	-13.9	264.43	14.0
900.0	0.75	262.60	899.9	-1.5	-15.5	264.60	15.6
1,000.0	1.11	246.81	999.8	-1.9	-17.1	263.54	17.2
1,100.0	1.21	261.12	1,099.8	-2.5	-19.0	262.57	19.2

Scientific Drilling International, Inc.

SDI Standard Survey Report



Company:	OCCIDENTAL PERMIAN LTD	Local Co-ordinate Reference:	Well Rum Runner "2" Federal Com #1H
Project:	Undesignated NW Bootleg Ridge Delaware	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Lea County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Rum Runner "2" Federal Com #1H	North Reference:	Grid
Wellbore:	VH - Job #32K0711688	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K0711688	Database:	EDM-Regulatory

Survey								
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)	
1,200.0	1.34	268.25	1,199.8	-2.7	-21.2	262.81	21.4	
1,300.0	1.33	274.10	1,299.8	-2.6	-23.6	263.63	23.7	
1,400.0	0.95	272.33	1,399.8	-2.5	-25.5	264.38	25.7	
1,500.0	1.18	263.67	1,499.7	-2.6	-27.4	264.59	27.5	
1,600.0	0.98	291.24	1,599.7	-2.4	-29.2	265.31	29.3	
1,700.0	1.07	279.72	1,699.7	-1.9	-30.9	266.43	31.0	
1,800.0	0.48	287.32	1,799.7	-1.6	-32.2	267.08	32.3	
1,900.0	0.51	314.49	1,899.7	-1.2	-33.0	267.90	33.0	
2,000.0	0.50	319.58	1,999.7	-0.6	-33.6	269.03	33.6	
2,100.0	0.29	63.82	2,099.7	-0.1	-33.6	269.79	33.6	
2,200.0	0.63	46.16	2,199.7	0.4	-33.0	270.64	33.0	
2,300.0	1.10	44.20	2,299.7	1.4	-31.9	272.58	32.0	
2,400.0	1.69	57.73	2,399.6	2.9	-30.0	275.54	30.2	
2,500.0	2.28	62.92	2,499.6	4.6	-27.0	279.68	27.4	
2,600.0	2.75	66.28	2,599.5	6.5	-23.0	285.71	23.9	
2,700.0	3.46	60.13	2,699.3	8.9	-18.2	296.15	20.3	
2,800.0	4.07	59.52	2,799.1	12.2	-12.5	314.32	17.5	
2,900.0	4.69	58.98	2,898.8	16.2	-6.0	339.68	17.2	
3,000.0	5.25	57.71	2,998.4	20.7	1.4	3.84	20.8	
3,100.0	6.11	56.95	3,098.0	26.1	9.7	20.46	27.8	
3,200.0	6.74	57.71	3,197.3	32.1	19.1	30.81	37.4	
3,300.0	6.70	61.69	3,296.6	38.0	29.2	37.58	47.9	
3,400.0	5.30	72.71	3,396.1	42.1	38.8	42.63	57.3	
3,500.0	4.93	71.10	3,495.7	44.9	47.3	46.47	65.2	
3,600.0	3.53	72.87	3,595.4	47.2	54.3	48.99	71.9	
3,700.0	2.26	75.85	3,695.3	48.6	59.1	50.59	76.5	
3,800.0	1.86	81.30	3,795.2	49.3	62.6	51.79	79.7	
3,900.0	1.02	105.00	3,895.2	49.3	65.1	52.85	81.7	
4,000.0	0.96	95.99	3,995.2	49.0	66.8	53.73	82.8	
4,100.0	0.96	62.59	4,095.2	49.3	68.4	54.20	84.3	
4,200.0	0.56	143.23	4,195.2	49.3	69.4	54.61	85.1	
4,300.0	0.52	110.16	4,295.2	48.8	70.1	55.19	85.4	
4,400.0	0.38	173.18	4,395.2	48.3	70.6	55.64	85.5	
4,500.0	0.45	172.74	4,495.2	47.5	70.7	56.07	85.2	
4,550.0	0.69	205.18	4,545.1	47.1	70.6	56.29	84.8	



Scientific Drilling
Directional Drilling Operations

Project: Undesignated NW Bootleg Ridge Delaware
Lea County, NM
Well: Rum Runner "2" Federal Com #1H
Ilbore: VH - Job #32K0711688
Design: VH - Job #32K0711688

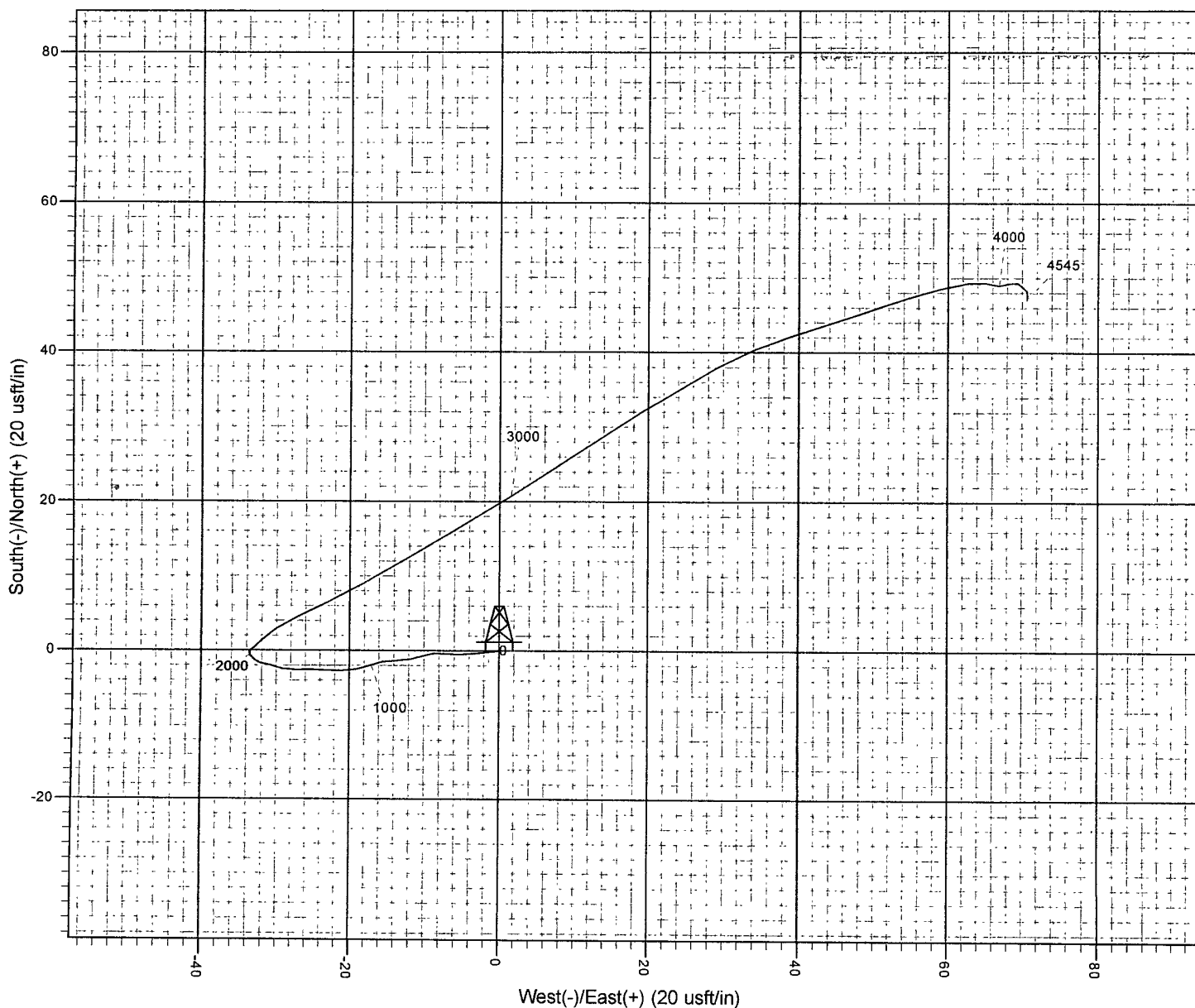


Azimuths to Grid North
True North: -0.37°
Magnetic North: 7.23°

Magnetic Field
Strength: 48728.1snT
Dip Angle: 60.35°
Date: 9/21/2011
Model: IGRF2010

WELL DETAILS: Rum Runner "2" Federal Com #1H
WELL @ 0.0usft (Original Well Elev)
Ground Level: 0.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	518124.18	714702.69	32° 25' 21.055 N	103° 38' 15.108 W	



PROJECT DETAILS: Undesignated NW Bootleg Ridge Delaware
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: Lea County, NM
Site Centre Latitude: 32° 25' 21.055 N
Longitude: 103° 38' 15.108 W
Positional Uncertainty: 0.0
Convergence: 0.37
Local North: Grid



Weatherford[®]

Evaluation, Drilling & Intervention
10000 West County Rd. 116
P.O. Box 61028
Midland, TX USA 79711
Tel. (432) 561-8892 Fax (432) 561-8895

Occidental Permian Ltd.
5 Greenway Plaza Suite 110
Houston Tx-77046

Date: January 12, 2012

Attention: Douglas Muir

Re: Occidental Permian Ltd
Well: Rum Runner 2
Lea County, New Mexico

SUR: H-02-22s-32e, 1980/N & 330/E
BHL: E-02-22s-32e, 2033/N & 4944/E
API # 30-025-40095

Enclosed, please find the original survey performed on the referenced well by Precision Energy Services, Inc. (P-5 No. 676004), a Weatherford company. Other information required by your office is as follows:

<u>Name & Title Of Surveyor</u>	<u>Well Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Michael Lockhart MWD Supervisor	2	4749' MD 10024' MD	7/12/2011 8/11/2011	Measurement While Drilling

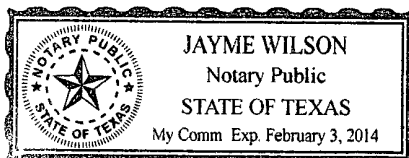
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Jesse Aguilar
MWD Ops. Coordinator

On this, the 12th day of January, 2012, before me a notary public, the undersigned officer, personally appeared Jesse Aguilar, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.

Notary Public





Occidental Permian Ltd.
Rum Runner 2 Fed Com #1H
Lea Co, New Mexico



Weatherford

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	4550.00	0.69	205.18	4545.15	47.09	70.57	0.00	0.00	-71.08	
2	4775.00	0.69	205.18	4770.13	44.64	69.42	0.00	0.00	-69.90	
3	4857.87	2.51	249.52	4852.96	43.55	67.51	2.50	57.80	-67.98	
4	7640.40	2.51	249.52	7632.84	0.95	-46.57	0.00	0.00	46.56	
5	7807.62	0.00	0.00	7800.00	-0.33	-50.00	1.50	180.00	50.00	
6	9032.62	0.00	0.00	9025.00	-0.33	-50.00	0.00	0.00	50.00	50' Tgt Radius

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#1H	0.00	0.00	518124.20	714702.70	32°25'21.056N	103°38'15.108W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
50' Tgt Radius	9025.00	-0.33	-50.00	518123.87	714652.70	Circle (Radius: 50)

LEGEND

- #1H Pilot Hole Plan #4
- #1H Pilot Hole Gyro
- Pilot Hole
- Wft Svy

FIELD DETAILS

Lea Co, New Mexico (Nad 27)

Geodetic System: US State Plane Coordinate System 1927
 Ellipsoid: NAD27 (Clarke 1866)
 Zone: New Mexico, Eastern Zone
 Magnetic Model: IGRF2010

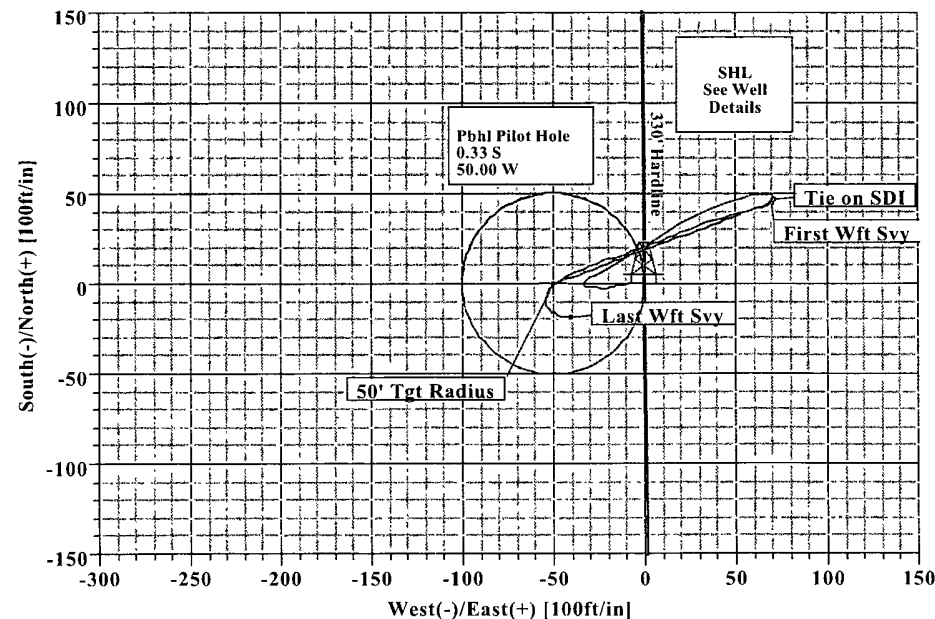
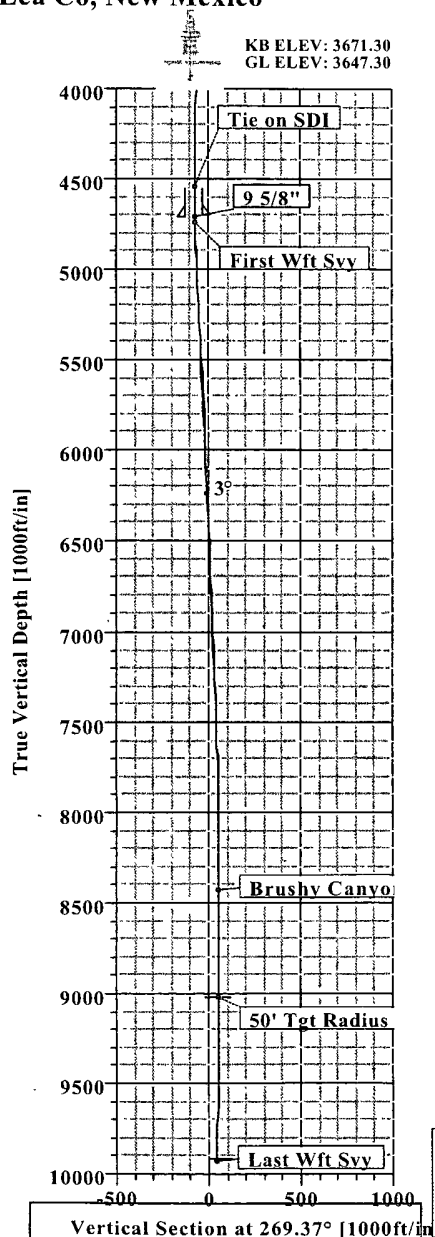
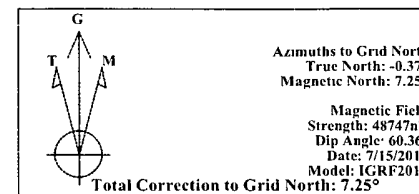
System Datum: Mean Sea Level
 Local North: Grid North

SITE DETAILS

Rum Runner 2 Fed Com #1H

Site Centre Northing: 518124.20
 Easting: 714702.70

Ground Level: 3647.30
 Positional Uncertainty: 0.00
 Convergence: 0.37



Survey: Wft Svy (#1H/Pilot Hole)

No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
58	9930.00	1.58	80.47	9922.06	-18.25	-40.18	0.18	-164.19	40.38

Survey: Wft Svy (#1H/Pilot Hole)

Created By: Keith Noack

Date: 7/29/2011



Weatherford International Ltd.

WFT Survey Report X & Y's



Weatherford

Company: Occidental Permian Ltd.	Date: 1/12/2012	Time: 06:52:36	Page: 1
Field: Lea Co, New Mexico (Nad 27)	Co-ordinate(NE) Reference: Well: #1H, Grid North		
Site: Rum Runner 2 Fed Com #1H	Vertical (TVD) Reference: SITE 3671.3		
Well: #1H	Section (VS) Reference: Well (0.00N,0.00E,269.37Azi)		
Wellpath: Pilot Hole	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: Wft Svy **Start Date:** 7/22/2011

Company: Weatherford International Ltd **Engineer:** Keith Noack
Tool: MWD,MWD - Standard **Tied-to:** User Defined

Field: Lea Co, New Mexico (Nad 27)

Map System: US State Plane Coordinate System 1927 **Map Zone:** New Mexico, Eastern Zone
Geo Datum: NAD27 (Clarke 1866) **Coordinate System:** Well Centre
Sys Datum: Mean Sea Level **Geomagnetic Model:** IGRF2010

Site: Rum Runner 2 Fed Com #1H

Site Position: **Northing:** 518124 20 ft **Latitude:** 32 25 21 056 N
From: Map **Easting:** 714702 70 ft **Longitude:** 103 38 15.108 W
Position Uncertainty: 0.00 ft **North Reference:** Grid
Ground Level: 3647.30 ft **Grid Convergence:** 0 37 deg

Well: #1H **Slot Name:**
Well Position: +N/-S 0 00 ft **Northing:** 518124 20 ft **Latitude:** 32 25 21 056 N
+/-W 0.00 ft **Easting:** 714702.70 ft **Longitude:** 103 38 15 108 W
Position Uncertainty: 0 00 ft

Wellpath: Pilot Hole **Drilled From:** Surface
Current Datum: SITE **Height** 3671 30 ft **Tie-on Depth:** 0.00 ft
Magnetic Data: 7/15/2011 **Above System Datum:** Mean Sea Level
Field Strength: 48747 nT **Declination:** 7 62 deg
Vertical Section: Depth From (TVD) +N/-S +E/-W **Mag Dip Angle:** 60 36 deg
ft ft ft **Direction**
deg
0 00 0.00 0 00 269 37

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
1185 20	1 32	267.28	1185 00	-2 66	-20.88	0 00	20 91	518121.54	714681 82	13 3/8"
4550 00	0 69	205 18	4545 15	47.09	70 57	0 03	-71.08	518171.29	714773 27	Tie on SDI
4715 00	0 74	204 84	4710.14	45.22	69 70	0 03	-70.19	518169.42	714772.40	9 5/8"
4749 00	0 75	204 77	4744 13	44.82	69 51	0 03	-70 00	518169 02	714772 21	First Wft Svy
4828.00	1 03	225 71	4823.12	43 86	68.79	0 54	-69 27	518168 06	714771 49	
4891 00	2 20	248 61	4886 10	43.02	67 26	2.09	-67 73	518167.22	714769.96	
4954.00	2.61	252 65	4949 04	42.15	64.76	0 70	-65 22	518166.35	714767.46	
5017 00	2 52	253.49	5011 98	41 33	62 07	0 15	-62 52	518165 53	714764 77	
5111 00	3.23	254.03	5105 86	40 02	57 54	0 76	-57 98	518164 22	714760.24	
5205.00	3 17	253 07	5199 71	38.53	52 51	0 09	-52 93	518162 73	714755.21	
5300 00	3 05	252 54	5294.57	37 01	47 58	0 13	-47 99	518161 21	714750 28	
5394 00	3 14	256 12	5388 44	35 64	42 70	0 23	-43 09	518159 84	714745 40	
5489 00	3 05	255.63	5483.30	34 39	37.72	0.10	-38.10	518158.59	714740.42	
5583 00	2 87	250 55	5577 17	32 98	33 08	0 34	-33 44	518157 18	714735.78	
5677.00	2.87	247 24	5671 05	31 29	28 69	0 18	-29.04	518155.49	714731.39	
5772 00	2.71	248.37	5765 94	29 54	24.41	0.18	-24 74	518153.74	714727 11	
5867.00	2 64	248 58	5860.84	27 91	20 29	0 07	-20 59	518152.11	714722 99	
5960 00	2 48	245 78	5953 75	26.31	16.46	0.22	-16 75	518150.51	714719 16	
6054 00	2 36	244 95	6047 66	24 65	12 85	0 13	-13 12	518148.85	714715 55	
6148 00	2 77	251 51	6141.57	23.11	8.94	0 54	-9 20	518147.31	714711 64	
6243 00	2.67	250.63	6236.46	21 65	4 68	0 11	-4 92	518145.85	714707.38	
6337 00	2 53	249 17	6330 36	20 19	0 67	0.16	-0 90	518144.39	714703 37	
6431.00	2.52	251 52	6424.27	18.79	-3 22	0 11	3 02	518142.99	714699 48	
6525 00	2 32	246.16	6518 19	17 37	-6.92	0 32	6 73	518141 57	714695.78	



Weatherford International Ltd.

WFT Survey Report X & Y's



Weatherford

Company:	Occidental Permian Ltd	Date:	1/12/2012	Time:	06:52:36	Page:	2
Field:	Lea Co. New Mexico (Nad 27)	Co-ordinate(NE) Reference:	Well: #1H, Grid North				
Site:	Rum Runner 2 Fed Com #1H	Vertical (TVD) Reference:	SITE 3671.3				
Well:	#1H	Section (VS) Reference:	Well (0.00N,0.00E,269.37Azi)				
Wellpath:	Pilot Hole	Survey Calculation Method:	Minimum Curvature			Db:	Sybase

Survey

MD ft	Incl deg	Azini deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
6619.00	2 25	245.52	6612 11	15 84	-10 34	0 08	10.17	518140 04	714692 36	
6713 00	2 18	258.70	6706 04	14 72	-13 78	0 55	13.61	518138 92	714688.92	
6807.00	1 98	256 17	6799 98	13 98	-17.11	0 23	16.95	518138 18	714685 59	
6902 00	1 97	254.25	6894.93	13 15	-20 27	0 07	20.13	518137.35	714682.43	
6996 00	1.90	246 42	6988.87	12 09	-23 26	0.29	23 12	518136.29	714679.44	
7090 00	2 44	243.86	7082 80	10 58	-26 48	0 58	26 36	518134 78	714676 22	
7184 00	2 43	246 72	7176 72	8 91	-30 11	0 13	30 01	518133 11	714672 59	
7279 00	2 43	248 50	7271 63	7 38	-33 83	0 08	33.75	518131 58	714668 87	
7373 00	2 63	246.70	7365 54	5 79	-37 67	0 23	37 60	518129 99	714665 03	
7468 00	2 20	245.83	7460 46	4 19	-41.33	0 45	41 28	518128.39	714661.37	
7561.00	1 76	237.90	7553 40	2.70	-44 17	0 56	44 14	518126.90	714658 53	
7655 00	1 31	230 09	7647 37	1.24	-46 22	0.53	46 20	518125.44	714656.48	
7749 00	1 24	236 14	7741 35	-0 02	-47.88	0.16	47 88	518124 18	714654 82	
7843.00	1 30	230.50	7835 32	-1.26	-49.55	0 15	49.56	518122.94	714653 15	
7937.00	0 73	235 29	7929 31	-2.28	-50.87	0.61	50 89	518121.92	714651.83	
8031.00	0 93	222.40	8023 30	-3.19	-51 87	0 29	51 91	518121 01	714650 83	
8125 00	0 39	200 60	8117 29	-4 05	-52.50	0 62	52.54	518120 15	714650.20	
8220.00	0 79	217.71	8212 29	-4 87	-53.02	0 46	53.07	518119.33	714649.68	
8314.00	0.52	187 74	8306.28	-5 80	-53.47	0 45	53.53	518118.40	714649 23	
8408.00	0 80	187 42	8400 27	-6.88	-53.61	0 30	53 68	518117 32	714649 09	
8438 73	0 84	185 36	8431 00	-7 31	-53.66	0 16	53.74	518116 89	714649 04	Brushy Canyon A
8517 00	0 95	180 95	8509 26	-8.54	-53.72	0.16	53.82	518115 66	714648 98	
8611.00	0 30	194.54	8603 25	-9.55	-53.80	0.70	53.90	518114 65	714648 90	
8705 00	0 42	165.34	8697.25	-10.12	-53 77	0.23	53.88	518114 08	714648 93	
8799 00	0 64	183 83	8791 25	-10.98	-53 72	0.29	53 84	518113.22	714648 98	
8894 00	0 75	172 85	8886.24	-12.13	-53.68	0 18	53.81	518112 07	714649 02	
8987.00	1 02	143.90	8979.23	-13.40	-53 12	0 55	53.26	518110.80	714649 58	
9082 00	1.25	150 27	9074.21	-14 98	-52.10	0 28	52.27	518109.22	714650.60	
9176.00	0 77	126 62	9168.20	-16.25	-51 09	0 67	51 26	518107 95	714651 61	
9271.00	0 85	18 69	9263.19	-15 96	-50 35	1 38	50.52	518108 24	714652 35	
9365 00	0.67	131 92	9357 19	-15 67	-49 72	1 35	49 89	518108 53	714652 98	
9459.00	0 40	177 08	9451.18	-16 37	-49 29	0.51	49.47	518107 83	714653 41	
9552.00	0 67	143 67	9544.18	-17 13	-48 95	0 43	49.14	518107.07	714653 75	
9647 00	1 09	118 21	9639 17	-18 00	-47 83	0 59	48.02	518106.20	714654 87	
9741 00	1 68	99 05	9733.14	-18 64	-45 68	0.79	45 88	518105.56	714657 02	
9836 00	1 74	82.12	9828.10	-18 66	-42 88	0.53	43 08	518105 54	714659 82	
9930 00	1 58	80 47	9922 06	-18 25	-40.18	0 18	40.38	518105 95	714662 52	
10024.00	1.25	88.11	10016.03	-18.00	-37.88	0.40	38 08	518106.20	714664 82	Last Wft Svy
10100.00	1.25	88 11	10092 01	-17 95	-36 22	0 00	36.42	518106.25	714666 48	Proj To Bit

Annotation

MD ft	TVD ft	
4550 00	4545 15	Tie on SDI
4749 00	4744 13	First Wft Svy
10024.00	10016 03	Last Wft Svy
10100 00	10092.01	Proj To Bit

Reservoir Development

Drilling & Measurements (Anadrill)

4301 SW 44th St

Oklahoma City, Oklahoma 73119 USA

Phone: (405) 682-2284

Fax: (405) 682-3937

June 24, 2011

OXY USA INC

P.O. Box 50250

Midland, TX 79710-0250

SUR: H-02-22s-32e, 1980/N & 330/E
BHL: E-02-22s-32e, 2033/N & 4944/E
API # 30-025-40095

Well Reference:

Surface Location: H-02-22S-32E 1980FNL 330FEL
Lat/Long: N 32.4226148013987 W - 103.638115077788

Re:

CLIENT: OXY USA INC
WELL: Rum Runner 2 Federal Com #1H ST01
FIELD: Bootleg Ridge Delaware NW
RIG: H&P 370
COUNTY: Lea
API NO: 30-025-40095-01
JOB NO: 11SWB0269

Enclosed, please find the original copy of the survey performed on the referenced well by Drilling & Measurements, a division of Schlumberger Technology Corporation.

Other information required by your office is as follows.

<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Patrick Cleaver FE-1	Rum Runner 2 Federal Com #1H ST01 Side Track	9909.00 Ft to 13737.00 Ft	August 14, 2011 to August 29, 2011	TeleScope

If any other information is required, please contact the undersigned at the above letterhead and phone number.

Sincerely,

Bradley Allen
Field Service Manager

Oxy Rum Runner 2 Fed Com #1H ST01 Final Survey Report

(Def Survey)

Report Date: August 29, 2011 - 10:13 AM
 Client: JXY USA Inc
 Field: Bootleg Ridge Delaware NW
 Structure / Slot: Oxy Rum Runner 2 Fed Com #1H ST01
 Well: Rum Runner 2 Federal Com #001H
 Borehole: ST01
 UWI / API#: 30-025-40095-01
 Survey Name: Oxy Rum Runner 2 Fed Com #1H MWD 8795ft to update
 Survey Date: August 11, 2011
 Tool / AHD / DDH / ERD Ratio: 169.405' / 4359.803 ft / 6.078' / 0.513
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 25' 21.05568", W 105° 38' 15.10756"
 Location Grid N/E Y/X: N 518124 200 NUS, E 714702 700 N JS
 CRS Grid Convergence Angle: 0.3730/423.3°
 Grid Scale Factor: 0.99950153
 County: Lea
 Rig: H & P 370

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 359.370° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RK8
 TVD Reference Elevation: 3671.300 ft above
 Seabed / Ground Elevation: 3647.300 ft above
 Magnetic Declination: 7.686°
 Total Field Strength: 48730.879 nT
 Magnetic Dip Angle: 60.335°
 Declination Date: August 11, 2011
 Magnetic Declination Model: BGGM 2011
 North Reference: Grid North
 Grid Convergence Used: 0.373°
 Total Corr Mag North -> Grid North: 7.313°

Local Coord Referenced To: Structure Reference Point
 First MD: 9909.00 Ft
 Last MD: 13737.00 Ft

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (N/S ft)	EW (E/W ft)	Closure (ft)	Closure Azimuth (°)	DLS (°/100ft)	TF (ft)
Top of Hole	0.00	0.00	0.00	0.00	0.00	N 0.00	E 0.00	0.00	0.00	N/A	254.16M
100.00	1.21	264.16	99.97	1.05	S 0.11	W 1.05	1.06	264.16	1.21	262.63M	
200.00	1.24	262.63	189.97	3.16	S 0.35	W 3.17	3.19	263.64	0.04	269.06M	
300.00	1.21	269.96	299.95	5.31	S 0.49	W 5.30	5.33	264.69	0.16	273.99M	
400.00	0.94	275.99	369.93	7.18	S 0.41	W 7.17	7.19	266.74	0.29	267.77M	
500.00	0.81	267.77	439.92	8.70	S 0.35	W 8.70	8.70	267.69	0.18	248.16M	
600.00	0.93	248.16	509.91	10.16	S 0.66	W 10.16	10.18	266.17	0.32	260.14M	
700.00	1.16	260.14	609.89	11.92	S 1.15	W 11.91	11.96	264.48	0.32	268.37M	
800.00	1.14	268.37	799.87	13.91	S 1.36	W 13.90	13.96	264.43	0.17	262.6M	
900.00	0.75	262.60	899.86	15.56	S 1.47	W 15.54	15.61	264.60	0.40	246.81M	
1000.00	1.11	246.81	999.84	17.10	S 1.93	W 17.08	17.19	263.54	0.44	251.12M	
1100.00	1.21	261.12	1099.82	19.04	S 2.48	W 19.01	19.18	262.57	0.31	268.25M	
1200.00	1.34	268.25	1199.80	21.25	S 2.88	W 21.23	21.39	262.81	0.20	274.1M	
1300.00	1.33	274.10	1299.77	23.58	S 2.63	W 23.55	23.70	263.63	0.14	272.33M	
1400.00	0.95	272.33	1399.75	25.56	S 2.51	W 25.54	25.66	264.38	0.38	263.67M	
1500.00	1.18	263.67	1499.73	27.42	S 2.59	W 27.39	27.51	264.59	0.28	297.24M	
1600.00	0.98	291.24	1599.72	29.24	S 2.40	W 29.21	29.31	265.31	0.55	279.72M	
1700.00	1.07	279.72	1699.70	30.95	S 1.93	W 30.93	30.99	266.43	0.22	267.32M	
1800.00	0.48	287.32	1799.69	32.26	S 1.65	W 32.25	32.29	267.08	0.60	314.49M	
1900.00	0.51	314.49	1899.69	32.98	S 1.21	W 32.97	32.99	267.90	0.23	319.58M	
2000.00	0.50	319.58	1999.68	33.57	S 0.57	W 33.57	33.57	269.03	0.05	63.92M	
2100.00	0.29	63.92	2099.68	33.62	S 0.12	W 33.62	33.62	269.79	0.61	49.16M	
2200.00	0.63	49.16	2199.68	32.99	N 0.37	W 33.00	33.00	270.64	0.36	44.2M	
2300.00	1.10	44.20	2299.67	31.91	N 1.44	W 31.93	31.97	272.58	0.47	57.73M	
2400.00	1.69	57.73	2399.64	29.98	N 2.91	W 30.02	30.16	275.54	0.67	62.92M	
2500.00	2.78	62.92	2499.58	26.95	N 4.61	W 27.00	27.39	279.88	0.62	66.28M	
2600.00	2.75	66.28	2599.48	22.96	N 6.48	W 23.03	23.92	285.71	0.49	60.13M	
2700.00	2.46	60.13	2699.32	18.12	N 8.94	W 18.22	20.30	296.15	0.73	59.62M	
2800.00	4.07	59.52	2799.12	12.41	N 12.25	W 12.54	17.53	314.32	0.61	58.96M	
2900.00	4.69	58.96	2898.82	5.80	N 16.15	W 5.98	17.23	339.88	0.62	57.71M	
3000.00	5.25	57.71	2998.45	-1.62	N 20.71	E 1.39	20.75	384	0.57	5.38M	
3100.00	6.11	56.95	3097.96	-10.00	N 26.05	E 9.72	27.81	20.46	0.86	8.07M	
3200.00	6.74	57.71	3197.33	-19.49	N 32.09	E 19.14	37.36	30.81	0.64	96.68M	
3300.00	6.70	61.69	3296.64	-29.65	N 37.99	E 29.24	47.94	37.58	0.47	145.95M	
3400.00	5.30	72.71	3396.09	-39.24	N 42.13	E 38.78	57.26	42.63	1.61	159.6L	
3500.00	4.93	71.10	3495.70	-47.75	N 44.89	E 47.26	65.18	46.47	0.40	72.87M	
3600.00	3.53	72.87	3595.42	-54.78	N 47.19	E 54.27	71.92	48.99	1.41	75.65M	
3700.00	2.26	75.85	3695.29	-59.65	N 48.58	E 59.12	76.52	50.59	1.28	61.3M	
3800.00	1.86	81.36	3795.23	-63.17	N 49.31	E 62.64	79.72	51.79	0.44	105M	
3900.00	1.02	105.00	3895.19	-65.64	N 49.33	E 65.10	81.68	52.85	1.01	55.99M	
4000.00	0.96	95.99	3995.18	-67.33	N 49.01	E 66.79	82.84	53.73	0.17	62.59M	
4100.00	0.96	61.59	4095.17	-68.91	N 49.31	E 68.37	84.20	54.20	0.55	143.23M	
4200.00	0.96	143.23	4195.16	-69.94	N 49.30	E 69.41	85.13	54.61	1.03	110.16M	
4300.00	0.52	110.16	4295.16	-70.66	N 48.75	E 70.12	85.41	55.19	0.31	173.18M	
4400.00	0.38	173.18	4395.15	-71.12	N 48.27	E 70.59	85.51	55.61	0.49	172.74M	
4500.00	0.45	172.74	4495.15	-71.20	N 47.55	E 70.68	85.18	56.07	0.07	205.18M	
4600.00	0.69	205.18	4595.15	-71.09	N 47.08	E 70.58	84.84	56.29	0.79	264.77M	
4700.00	0.75	204.77	4744.13	-70.01	N 44.81	E 69.52	82.71	57.19	0.03	225.71M	
4800.00	1.03	225.71	4823.12	-69.27	N 43.85	E 68.80	81.58	57.49	0.54	248.61M	
4900.00	2.20	248.61	4886.10	-67.73	N 43.01	E 67.26	79.64	57.40	2.09	252.65M	
5000.00	2.61	252.65	4949.04	-65.23	N 42.14	E 64.77	77.27	56.95	0.70	251.49M	
5100.00	2.52	253.49	5011.98	-62.52	N 41.32	E 62.07	74.57	56.35	0.15	254.03M	
5200.00	3.23	254.03	5105.86	-57.98	N 40.01	E 57.54	70.08	55.19	0.76	253.07M	
5300.00	3.17	253.07	5199.71	-52.93	N 38.52	E 52.51	65.13	53.74	0.09	252.54M	
5400.00	3.05	252.54	5294.57	-47.99	N 37.00	E 47.59	60.28	52.14	0.13	256.12M	
5500.00	3.14	246.12	5388.44	-43.09	N 35.63	E 42.70	55.61	50.16	0.23	255.63M	
5600.00	3.05	255.63	5493.30	-38.15	N 34.38	E 37.73	51.04	47.66	0.10	256.55M	
5700.00	2.67	250.55	5577.17	-33.45	N 32.97	E 33.09	46.71	45.10	0.34	247.24M	
5800.00	2.87	247.24	5671.05	-29.04	N 31.28	E 28.70	42.45	42.54	0.18	248.37M	

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (NS ft)	EW (EW ft)	Closure (ft)	Closure Azimuth (°)	DLS (ft/100ft)	TS (°)
	5772.00	2.71	248.57	5765.94	24.74	N 29.53	E 24.42	38.32	39.59	0.18	248.58M
	5867.00	2.84	248.58	5860.84	-20.60	N 27.90	E 20.29	34.50	36.03	0.07	245.78M
	5960.00	2.48	245.78	5953.75	-16.75	N 26.30	E 16.46	31.03	32.05	0.22	244.95M
	6054.00	2.36	244.95	6047.66	-13.13	N 24.64	E 12.86	27.80	27.55	0.13	251.51M
	6148.00	2.77	251.51	6141.57	-9.20	N 23.10	E 8.95	24.78	21.17	0.54	250.63M
	6243.00	2.67	250.63	6236.45	-4.92	N 21.64	E 4.68	22.14	12.21	0.11	249.17M
	6337.00	2.53	249.17	6330.36	-0.90	N 20.18	E 0.68	20.19	1.93	0.16	251.52M
	6431.00	2.52	251.52	6424.27	3.01	N 18.78	W 3.22	19.06	350.28	0.11	246.16M
	6525.00	2.32	246.16	6518.19	6.73	N 17.36	W 6.92	18.69	338.27	0.32	245.52M
	6619.00	2.25	245.52	6612.11	10.16	N 15.83	W 10.34	18.90	326.85	0.08	258.77M
	6713.00	2.18	258.77	6706.04	13.61	N 14.71	W 13.77	20.15	316.89	0.55	256.17M
	6807.00	1.98	256.17	6799.96	16.95	N 13.97	W 17.10	22.08	309.25	0.21	254.25M
	6902.00	1.97	254.25	6894.93	20.12	N 13.14	W 20.27	24.15	302.95	0.67	246.42M
	6996.00	1.90	246.42	6988.87	23.12	N 12.08	W 23.25	26.20	297.45	0.29	243.86M
	7090.00	2.44	243.86	7082.80	26.36	N 10.57	W 26.47	28.51	291.77	0.58	246.12M
	7184.00	2.43	246.72	7176.72	30.00	N 8.50	W 30.10	31.39	286.47	0.13	248.55M
	7278.00	2.43	248.50	7271.63	33.74	N 7.37	W 33.82	34.62	282.29	0.08	246.77M
	7373.00	2.63	248.70	7365.54	37.59	N 5.78	W 37.66	38.10	278.73	0.23	245.83M
	7468.00	2.20	245.83	7460.46	41.28	N 4.18	W 41.33	41.54	275.77	0.45	237.97M
	7563.00	1.70	237.80	7553.40	44.13	N 2.69	W 44.16	44.25	273.49	0.66	230.09M
	7658.00	1.31	230.09	7647.37	46.19	N 1.23	W 46.21	46.23	271.12	0.53	236.14M
	7749.00	1.24	236.14	7741.35	47.88	S 0.03	W 47.88	47.88	269.97	0.16	230.55M
	7843.00	1.30	230.50	7835.32	49.56	S 1.27	W 49.55	49.56	268.53	0.15	235.29M
	7937.00	0.73	235.29	7929.31	50.86	S 2.29	W 50.86	50.91	267.42	0.51	222.44M
	8031.00	0.43	222.40	8023.30	51.90	S 3.20	W 51.87	51.97	266.48	0.29	200.61M
	8125.00	0.39	200.60	8117.29	52.54	S 4.06	W 52.50	52.65	265.18	0.62	217.71M
	8220.00	0.79	217.71	8212.29	53.06	S 4.88	W 53.01	53.23	264.74	0.46	187.74M
	8314.00	0.52	187.74	8306.28	53.52	S 5.81	W 53.46	53.78	263.79	0.45	187.42M
	8408.00	0.80	187.42	8400.27	53.68	S 6.89	W 53.61	54.05	262.68	0.30	180.95M
	8517.00	0.95	180.95	8509.26	53.81	S 8.55	W 53.72	54.39	260.96	0.16	194.64M
	8611.00	0.30	194.54	8603.25	53.90	S 9.56	W 53.79	54.64	259.92	0.70	165.34M
	8705.00	0.42	165.34	8697.25	53.88	S 10.13	W 53.77	54.71	259.33	0.23	183.93M
	8799.00	0.64	183.83	8791.25	53.83	S 10.99	W 53.72	54.83	258.44	0.29	257.96M
	8893.00	2.70	257.96	8885.24	54.76	S 11.45	W 54.64	55.82	258.16	4.41	281.99M
	8987.00	6.20	281.99	8979.15	56.98	S 11.23	W 56.86	57.95	256.83	13.82	14.9R
	9081.00	11.78	289.80	9071.77	61.62	S 9.86	W 61.51	62.30	260.89	16.17	6.63L
	9175.00	15.56	286.36	9167.91	68.46	S 7.71	W 68.38	69.81	263.57	13.99	34.21L
	9269.00	17.31	282.51	9261.64	76.93	S 5.53	W 76.89	77.08	265.68	6.60	48.66L
	9363.00	18.45	278.56	9355.10	86.57	S 3.75	W 86.53	86.61	267.52	5.20	33.96L
	9457.00	19.97	275.61	9448.37	96.67	S 2.50	W 96.65	96.68	268.52	5.82	29.29L
	9551.00	21.80	272.86	9541.27	108.04	S 1.67	W 108.03	108.04	269.12	6.48	14.31L
	9645.00	23.85	271.59	9637.84	120.05	S 1.20	W 120.04	120.05	269.42	6.81	34.17L
	9739.00	25.53	268.98	9730.97	133.41	S 1.15	W 133.40	133.41	269.51	6.26	7.49L
	9833.00	28.59	268.14	9824.52	147.51	S 1.51	W 147.50	147.51	269.41	8.65	17.92L
	9927.00	30.97	268.65	9918.42	162.89	S 2.21	W 162.88	162.89	269.22	8.04	58.13L
	10021.00	32.14	263.25	10012.69	179.58	S 3.70	W 179.55	179.59	268.82	6.65	10.67R
	10115.00	31.00	263.84	10106.67	196.41	S 5.60	W 196.36	196.44	268.37	6.09	0.65L
	10209.00	35.54	263.81	10200.13	214.01	S 7.50	W 213.94	214.07	267.99	4.97	4.14
	10303.00	38.10	263.51	10290.75	233.09	S 9.62	W 232.99	233.19	267.64	8.02	3.22R
	10397.00	40.65	263.73	10281.71	252.65	S 11.80	W 252.54	252.81	267.32	8.24	74.47L
	10491.00	40.89	262.45	10272.95	273.42	S 14.32	W 273.28	273.66	267.03	2.72	29.36L
	10585.00	42.37	261.22	10264.86	294.50	S 17.34	W 294.32	294.83	266.63	5.28	1.64R
	10679.00	46.15	261.37	10256.06	315.91	S 20.61	W 315.70	316.38	266.26	12.29	7.37R
	10773.00	51.16	262.20	10246.53	336.97	S 23.93	W 336.73	337.58	265.96	16.29	8.8R
	10867.00	56.91	263.26	10236.32	364.69	S 27.20	W 364.41	365.43	265.73	18.17	9.16R
	10961.00	62.42	264.75	10226.97	391.31	S 30.10	W 391.00	392.16	265.60	17.99	27.79R
	11055.00	67.67	267.23	10217.47	420.25	S 32.23	W 419.92	421.16	265.61	18.44	36.38R
	11149.00	69.65	269.78	10207.75	449.11	S 33.23	W 448.77	450.00	265.76	7.90	30.35R
	11243.00	71.09	269.67	10197.16	478.31	S 33.63	W 477.97	479.15	265.98	5.37	30.22R
	11337.00	74.24	271.57	10186.70	508.84	S 33.29	W 508.51	509.60	266.25	11.36	14.73R
	11431.00	76.91	272.29	10176.42	538.83	S 32.78	W 538.51	539.48	266.57	8.90	9.02R
	11525.00	80.83	272.92	10166.40	568.20	S 30.80	W 568.89	569.73	266.89	12.80	11.92R
	11619.00	87.52	274.33	10156.78	621.75	S 27.56	W 621.48	622.09	267.46	12.69	1.06R
	11713.00	89.69	274.37	10146.39	646.64	S 25.87	W 646.40	646.91	267.73	8.68	77.66L
	11807.00	90.34	271.40	10136.36	751.43	S 20.38	W 751.25	751.53	268.45	2.90	77.31L
	11901.00	91.12	267.93	10126.18	845.41	S 20.93	W 845.23	845.49	268.50	3.78	98.13R
	12000.00	91.09	268.4	10116.35	939.37	S 24.15	W 939.16	939.47	268.53	0.73	104.83L
	12094.00	91.03	267.80	10106.63	1033.32	S 27.48	W 1033.08	1033.45	268.48	0.37	65.89R
	12188.00	91.17	268.18	10096.89	1125.28	S 30.71	W 1125.01	1125.43	268.41	0.45	90R
	12282.00	91.17	268.86	10087.97	1219.25	S 33.12	W 1218.96	1219.41	268.44	0.74	107.83R
	12376.00	90.80	270.03	10078.36	1313.23	S 34.01	W 1312.94	1313.38	268.52	1.28	117.98L
	12470.00	90.63	269.71	10068.17	1408.22	S 34.23	W 1407.93	1408.35	268.61	0.38	33.32L
	12564.00	92.12	268.73	10057.92	1502.19	S 35.51	W 1501.80	1502.31	268.65	1.90	85.44R
	12658.00	92.18	269.48	10047.39	1596.12	S 36.98	W 1595.81	1596.24	268.67	0.60	97.75R
	12752.00	92.03	270.38	10036.94	1690.05	S 36.93	W 1689.75	1690.15	268.75	1.18	147.11
	12846.00	91.52	270.25	10026.99	1784.99	S 36.24	W 1784.70	1785.07	268.84	0.64	28.13L
	12940.00	91.95	270.02	10016.15	1878.94	S 36.02	W 1878.65	1879.00	268.90	0.52	72.14R
	13034.00	92.15	270.64	10005.78	1972.86	S 35.48	W 1972.59	1972.91	268.97	0.69	3.57R
	13128.00	92.96	270.69	10000.60	2066.75	S 34.39	W 2066.49	2066.78	269.05	0.65	41.38R
	13222.00	93.17	270.84	10000.63	2160.59	S 33.13	W 2160.35	2160.61	269.12	0.74	90L
	13316.00	93.12	270.47	10000.51	2254.42	S 32.06	W 2254.21	2254.43	269.19	0.39	125.91L

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (N/S ft)	EW (E/W ft)	Closure (ft)	Closure Azimuth (°)	DLS ("/100ft)	TF (°)
	11508.00	92.78	270.00	9432.62	2349.29	S 31.67	W 2349.08	2349.29	269.23	0.61	158.04L
	11602.00	91.60	269.64	9428.87	2443.21	S 31.07	W 2443.00	2443.21	269.25	1.11	118.75L
	11696.00	91.63	269.33	9426.05	2537.16	S 32.81	W 2536.96	2537.17	269.26	0.38	148.13R
	11790.00	90.89	269.70	9423.93	2631.14	S 33.53	W 2630.93	2631.14	269.27	0.93	96.49R
	11884.00	90.80	270.58	9422.60	2725.12	S 33.23	W 2724.92	2725.12	269.30	0.85	44.99L
	11978.00	91.15	270.23	9421.00	2819.09	S 32.57	W 2818.90	2819.09	269.34	0.53	107.91L
	12072.00	90.63	269.24	9419.38	2913.07	S 33.00	W 2912.89	2913.07	269.35	1.11	171.71R
	12166.00	89.80	269.39	9418.96	3007.07	S 34.12	W 3006.88	3007.07	269.35	1.11	130.96L
	12260.00	89.34	268.86	9419.56	3101.07	S 35.56	W 3100.86	3101.07	269.34	0.75	22.5L
	12354.00	90.74	268.28	9419.50	3195.05	S 37.90	W 3194.83	3195.05	269.32	1.61	173.77L
	12448.00	88.54	268.04	9420.09	3289.03	S 40.92	W 3288.77	3289.03	269.29	2.35	90R
	12542.00	88.54	268.65	9422.48	3382.98	S 43.64	W 3382.70	3382.99	269.26	0.65	87.28R
	12636.00	88.57	269.28	9424.85	3476.95	S 45.33	W 3476.66	3476.95	269.25	0.67	49.76L
	12730.00	88.68	269.15	9427.11	3570.92	S 46.67	W 3570.62	3570.93	269.25	0.10	109.99R
	12825.00	88.51	269.82	9429.44	3665.89	S 47.64	W 3665.59	3665.90	269.26	0.53	59.03L
	12919.00	88.54	269.57	9431.86	3759.86	S 48.31	W 3759.55	3759.86	269.26	0.06	69.14R
	13013.00	88.67	269.78	9434.19	3853.82	S 48.84	W 3853.52	3853.83	269.27	0.24	127.71R
	13108.00	88.45	270.00	9436.62	3946.79	S 49.02	W 3946.49	3946.80	269.29	0.29	136.49R
	13202.00	88.05	270.36	9439.49	4042.74	S 48.71	W 4042.45	4042.74	269.31	0.59	156.2L
	13296.00	88.65	269.85	9443.67	4136.64	S 48.52	W 4136.35	4136.64	269.33	1.40	129.47R
	13390.00	88.39	270.41	9446.21	4230.46	S 48.31	W 4230.19	4230.46	269.35	0.77	16L
	13484.00	87.54	270.08	9454.19	4324.32	S 47.91	W 4324.05	4324.32	269.37	1.27	145.89L
	13579.00	86.70	269.51	9458.96	4419.20	S 48.25	W 4418.93	4419.20	269.37	1.07	88.29L
	13672.00	86.73	268.52	9464.29	4512.04	S 49.84	W 4511.76	4512.04	269.37	1.06	176.14L
	13737.00	85.99	268.47	9468.42	4576.90	S 51.55	W 4576.61	4576.90	269.35	1.14	HS
proposed TD	13774.00	85.99	268.47	9471.01	4613.81	S 52.53	W 4613.51	4613.81	269.35	0.00	

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7055 sigma

Survey Program

MD From (ft)	MD To (ft)	LOG Freq (ft)	Survey Tool Type	Borehole / Survey
0.000	24.000	Act Sins	SLB_NSG+MSHOT Depth Only	Pilot Hole / Oxy Rum Runner 2 Fed Com #1H Pilot Hole Gyro + MWD 0ft to 8910ft
24.000	4500.000	Act Sins	SLB_NSG+MSHOT	Pilot Hole / Oxy Rum Runner 2 Fed Com #1H Pilot Hole Gyro + MWD 0ft to 8910ft
4500.000	8799.000	Act Sins	SLB_MWD STD	Pilot Hole / Oxy Rum Runner 2 Fed Com #1H Pilot Hole Gyro + MWD 0ft to 8910ft
8799.000	13774.000	Act Sins	SLB_MWD STD	ST01 / Oxy Rum Runner 2 Fed Com #1H MWD 8799ft to update

Reservoir Development

Drilling & Measurements (Anadrill)

4301 SW 44th St

Oklahoma City, Oklahoma 73119 USA

Phone: (405) 682-2284

Fax: (405) 682-3937

Well Reference:

Sec 2 T22S R32E

N 32.42252 W 103.63753

I, Patrick Cleaver certify that; I am employed by Drilling & Measurements (formerly Anadrill), a division of Schlumberger Technology Corporation; that I did on the day(s) of August 14, 2011 through August 29, 2011, conduct or supervise the taking of the TeleScope surveys from a depth of 9909.00 feet to a depth of 13737.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of OXY USA INC for the Rum Runner 2 Federal Com #1H ST01 Well (Side Track) API No. 30-025-40095-01 and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation.

By

Patrick Cleaver(signature)

FE-1



Subscribed and Sworn to before me this _____ day of _____ (month) _____ (yr)

My Commission expires:

Notary Public

(County State)

(signature)