Results of Directional Survey

API number:	30-025-41238			
OGRID:		Operator:	MEWBOURNE OIL CO	
		Property:	QUERECHO 28 NC FEDERAL	# 1H

surface	ULSTR:	N	28	T	18S	R	32E
				150	FSL	2230	FWL

BH Loc	ULSTR:	C	28	T	18S	R	32E
13893	MD	9388.1	TVD	482	FNL	1696	FWL
				4798	FSL		

Top Perf/OH	ULSTR:	N	28	T	18S	R	32E
9792	MD	9404.5	TVD	724	FSL	2149	FWL

Bot Perf/OH	ULSTR:	C	28	T	18S	R	32E
13870	MD	9386.9	TVD	504	FNL	1698	FWL
				4776	FSL		

	MD	N/S	E/W	VD
	9791	573.30	-80.70	9404.5
TOP PERFS/OH	**9792**	574.30	-80.77	9404.48
	9823	605.20	-82.80	9403.90
	13848	4603.70	-530.50	9385.80
BOT PERFS/OH	**13870**	4625.55	-532.46	9386.92
	13893	4648.40	-534.50	9388.10

NEXT TO LAST	13848	4603.70	-530.50	9385.80
LAST READING	13893	4648.40	-534.50	9388.10
TD	**13893**	4648.40	-534.50	9388.10

Surface Location	150	FS	2230	FW
Projected BHL	4798	FS	1696	FW
Location of				
Top Perfs/OH	724	FS	2149	FW
Bottom Perfs/OH	4776	FS	1698	FW

SUMMARY of Subsurface Locations

Surface Location	N-28-18S-32E	150	FS	2230	FW	Vert. Depth
Top Perfs/OH	N-28-18S-32E	724	FS	2149	FW	9404.48
Bottom Perfs/OH	C-28-18S-32E	4776	FS	1698	FW	9386.92
Projected TD	C-28-18S-32E	4798	FS	1696	FW	9388.10

DEC 31 2013

OPERATOR MEWBOURNE OIL COMPANY
WELL/LEASE QUERECHO 28 NC FED #1H
COUNTY LEA

STATE OF NEW MEXICO
DEVIATION REPORT

267	0.00
449	0.00
718	0.50
1,010	1.00
1,394	2.00
1,794	1.00
2,252	2.00
2,612	2.50
3,060	1.50
3,508	1.00
3,960	1.50
4,862	0.50
5,314	0.50
5,766	0.00
6,217	2.00
6,488	1.50
6,759	1.00
7,030	2.00
7,301	3.00
7,436	1.00
7,571	1.50
7,981	3.00
8,207	3.50
8,715	2.50

DIRECTIONAL

HOBBS OCD

DEC 02 2013

RECEIVED

BY: Cyndi Reynolds

STATE OF TEXAS

COUNTY OF HARRIS

The foregoing instrument was acknowledged before me on 14th of November 2013 by Cyndi Reynolds on behalf of Trinidad Drilling, LP.

Notary Public for Harris County, Texas
My Commission Expires:

NOTARY PUBLIC STATE OF TEXAS
KRISTIN MARIE ARROYO
My Commission Expires
September 26, 2016

Company: Mewbourne Oil Company
Lease/Well: Querecho 28 NC Federal/No. 001H
Location: 34.86 miles West of Hobbs, NM
Rig Name: Trinidad 110
State/County: New Mexico/Lea
Latitude: 32.71, Longitude: -103.77
GRID North is 0.30 Degrees East of True North
VS-Azi: 352.81 Degrees

Depth Reference : RKB = 17.5 ft

DRILLOG HA GYRO SURVEY CALCULATIONS
Filename: ...nc federal #1h gyro survey.ut
Minimum Curvature Method
Report Date/Time: 10/8/2013 / 10:39

Vaughn Energy Services
Midland, TX
432-563-5444
Surveyor: Stephen Allen
Querecho 28 NC Federal No. 001H / API 30-025-41238

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.16	276.82	100.00	0.02	-0.13	0.03	0.14	276.82	0.16
200.00	0.13	257.72	200.00	0.01	-0.38	0.06	0.38	271.36	0.06
300.00	0.25	215.60	300.00	-0.19	-0.61	-0.11	0.64	252.75	0.17
400.00	0.05	191.50	400.00	-0.40	-0.74	-0.31	0.84	241.39	0.20
500.00	0.03	114.38	500.00	-0.46	-0.72	-0.36	0.86	237.66	0.05
600.00	0.10	70.79	600.00	-0.44	-0.61	-0.36	0.75	234.25	0.08
700.00	0.14	26.55	700.00	-0.31	-0.47	-0.24	0.56	237.27	0.10
800.00	0.03	28.96	800.00	-0.17	-0.41	-0.12	0.44	246.90	0.10
900.00	0.13	30.61	900.00	-0.05	-0.34	-0.01	0.34	260.78	0.09
1000.00	0.19	32.31	1000.00	0.18	-0.19	0.21	0.27	313.63	0.07
1100.00	0.23	33.86	1100.00	0.49	0.01	0.49	0.49	1.33	0.04
1200.00	0.24	35.30	1200.00	0.83	0.25	0.80	0.87	16.41	0.01
1300.00	0.18	26.24	1300.00	1.15	0.44	1.08	1.23	20.85	0.07
1400.00	0.58	40.94	1399.99	1.67	0.84	1.55	1.87	26.67	0.41
1500.00	0.44	47.28	1499.99	2.31	1.45	2.11	2.73	32.14	0.15
1600.00	0.84	76.63	1599.98	2.74	2.45	2.41	3.68	41.78	0.51
1700.00	0.75	92.61	1699.97	2.88	3.82	2.38	4.79	52.96	0.24
1800.00	0.72	78.00	1799.97	2.99	5.09	2.32	5.90	59.62	0.19

VES Survey Date: 10/01/2013

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1900.00	0.56	69.18	1899.96	3.29	6.17	2.49	6.99	61.92	0.19
2000.00	0.70	64.01	1999.95	3.73	7.18	2.81	8.09	62.52	0.15
2100.00	1.17	54.56	2099.94	4.59	8.56	3.49	9.71	61.78	0.50
2200.00	1.98	52.34	2199.90	6.24	10.76	4.84	12.44	59.88	0.80
2300.00	2.26	52.62	2299.83	8.49	13.69	6.71	16.11	58.19	0.28
2400.00	2.58	50.13	2399.74	11.13	16.98	8.92	20.30	56.76	0.33
2500.00	2.41	46.79	2499.65	14.01	20.24	11.37	24.61	55.31	0.22
2600.00	2.24	45.06	2599.57	16.83	23.16	13.80	28.63	53.99	0.18
2700.00	1.88	45.20	2699.50	19.37	25.71	16.00	32.19	53.00	0.36
2800.00	1.74	58.16	2799.45	21.33	28.16	17.64	35.33	52.86	0.43
2900.00	1.29	58.82	2899.42	22.71	30.42	18.73	37.96	53.25	0.45
3000.00	1.32	59.24	2999.39	23.89	32.37	19.65	40.23	53.58	0.03
3100.00	1.30	78.74	3099.36	24.70	34.47	20.19	42.41	54.38	0.44
3200.00	1.28	74.17	3199.34	25.22	36.66	20.44	44.50	55.47	0.10
3300.00	1.13	71.44	3299.32	25.84	38.66	20.80	46.51	56.24	0.15
3400.00	1.14	72.82	3399.30	26.45	40.55	21.17	48.42	56.88	0.03
3500.00	1.01	72.87	3499.28	27.01	42.35	21.49	50.23	57.47	0.13
3600.00	1.29	72.93	3599.26	27.60	44.27	21.84	52.17	58.06	0.28
3700.00	1.11	75.83	3699.24	28.17	46.29	22.15	54.19	58.68	0.19
3800.00	1.20	82.32	3799.22	28.54	48.27	22.28	56.08	59.40	0.16
3900.00	0.93	76.84	3899.20	28.87	50.10	22.37	57.82	60.05	0.28
4000.00	1.14	73.20	3999.18	29.34	51.84	22.62	59.57	60.49	0.21
4100.00	1.00	65.97	4099.17	29.98	53.59	23.04	61.41	60.77	0.19
4200.00	0.88	68.73	4199.15	30.62	55.10	23.48	63.04	60.94	0.13
4300.00	0.83	69.82	4299.14	31.15	56.50	23.83	64.52	61.13	0.05
4400.00	0.76	73.56	4399.13	31.58	57.81	24.10	65.88	61.35	0.09
4500.00	0.64	71.62	4499.12	31.95	58.98	24.31	67.07	61.56	0.12
4600.00	0.46	70.02	4599.12	32.26	59.88	24.51	68.02	61.69	0.19
4700.00	0.61	65.99	4699.12	32.61	60.74	24.75	68.94	61.77	0.16
4800.00	0.32	58.09	4799.11	32.98	61.47	25.02	69.76	61.79	0.29
4900.00	0.45	68.13	4899.11	33.27	62.07	25.24	70.43	61.81	0.15
5000.00	0.54	76.64	4999.11	33.53	62.90	25.39	71.28	61.94	0.11
5100.00	0.51	80.25	5099.10	33.71	63.80	25.46	72.16	62.15	0.04
5200.00	0.46	90.73	5199.10	33.79	64.65	25.43	72.94	62.41	0.10
5300.00	0.09	95.13	5299.10	33.77	65.13	25.36	73.37	62.59	0.37
5400.00	0.28	100.27	5399.10	33.72	65.45	25.26	73.63	62.74	0.19
5500.00	0.26	204.87	5499.10	33.47	65.60	25.00	73.65	62.97	0.43
5600.00	1.63	256.04	5599.08	32.93	64.13	24.64	72.09	62.82	1.48
5700.00	2.01	254.61	5699.03	32.12	61.06	24.23	68.99	62.25	0.39

VES Survey Date: 10/01/2013

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5800.00	2.12	256.35	5798.96	31.22	57.57	23.77	65.49	61.53	0.12
5900.00	2.12	251.42	5898.90	30.19	54.03	23.19	61.89	60.80	0.18
6000.00	2.25	249.52	5998.82	28.92	50.44	22.38	58.14	60.17	0.15
6100.00	2.31	253.36	6098.75	27.66	46.67	21.60	54.25	59.35	0.16
6200.00	1.75	252.87	6198.68	26.63	43.29	21.00	50.82	58.40	0.56
6300.00	1.68	254.05	6298.64	25.78	40.42	20.52	47.94	57.47	0.08
6400.00	1.45	251.33	6398.60	24.97	37.81	20.04	45.31	56.56	0.24
6500.00	1.26	248.75	6498.57	24.16	35.58	19.52	43.01	55.82	0.20
6600.00	1.26	256.49	6598.55	23.51	33.48	19.13	40.91	54.93	0.17
6700.00	1.30	250.82	6698.52	22.88	31.34	18.78	38.80	53.87	0.13
6800.00	1.27	249.29	6798.50	22.11	29.23	18.28	36.65	52.89	0.04
6900.00	1.12	243.71	6898.48	21.29	27.31	17.70	34.63	52.07	0.19
7000.00	1.80	235.70	6998.44	19.97	25.14	16.67	32.10	51.54	0.70
7100.00	1.11	228.31	7098.41	18.44	23.12	15.40	29.58	51.42	0.71
7200.00	0.69	192.14	7198.40	17.21	22.28	14.29	28.15	52.31	0.68
7300.00	1.12	157.17	7298.39	15.72	22.53	12.78	27.47	55.09	0.68
7400.00	1.13	149.21	7398.37	13.97	23.41	10.93	27.26	59.17	0.16
7500.00	1.72	148.34	7498.34	11.85	24.70	8.66	27.40	64.37	0.58
7600.00	1.85	146.46	7598.29	9.23	26.38	5.85	27.95	70.73	0.15
7700.00	2.51	158.55	7698.21	5.84	28.08	2.28	28.68	78.26	0.80
7800.00	3.20	171.08	7798.09	1.04	29.31	-2.64	29.33	87.96	0.92
7900.00	3.34	184.90	7897.93	-4.62	29.50	-8.27	29.86	98.89	0.80
8000.00	3.55	199.66	7997.75	-10.43	28.21	-13.88	30.07	110.30	0.91
8100.00	3.48	192.71	8097.56	-16.31	26.50	-19.50	31.11	121.61	0.43
8200.00	3.73	189.22	8197.37	-22.48	25.31	-25.47	33.85	131.62	0.33
8300.00	4.47	189.88	8297.11	-29.54	24.12	-32.32	38.13	140.77	0.74
8400.00	4.39	184.43	8396.81	-37.19	23.15	-39.80	43.81	148.10	0.43
8500.00	3.94	180.52	8496.55	-44.44	22.83	-46.95	49.96	152.81	0.53
8600.00	3.41	181.56	8596.34	-50.85	22.71	-53.30	55.70	155.93	0.53
8700.00	2.91	184.18	8696.19	-56.36	22.45	-58.73	60.67	158.28	0.53
8800.00	2.63	186.60	8796.07	-61.17	22.00	-63.44	65.00	160.22	0.30

VES Survey Date: 10/01/2013

COMPANY: Mewbourne Oil Company .
WELL: Querecho 28 NC Federal Com #1H
COUNTY: Lea County N.M.
DATUM: NAD 1927 (NADCON CONUS)
RIG: Patterson 110
GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 7.13°

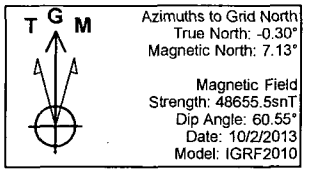
OFFICE: 936.582.7296

GEODETIC ZONE: New Mexico East 3001
GL 3709 + 20 @ 3729.0usft (Patterson 110)
GROUND ELEVATION: 3709.0

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	Slot
0.0	0.0	623025.11	672612.56	32° 42' 41.534 N	103° 46' 19.689 W	

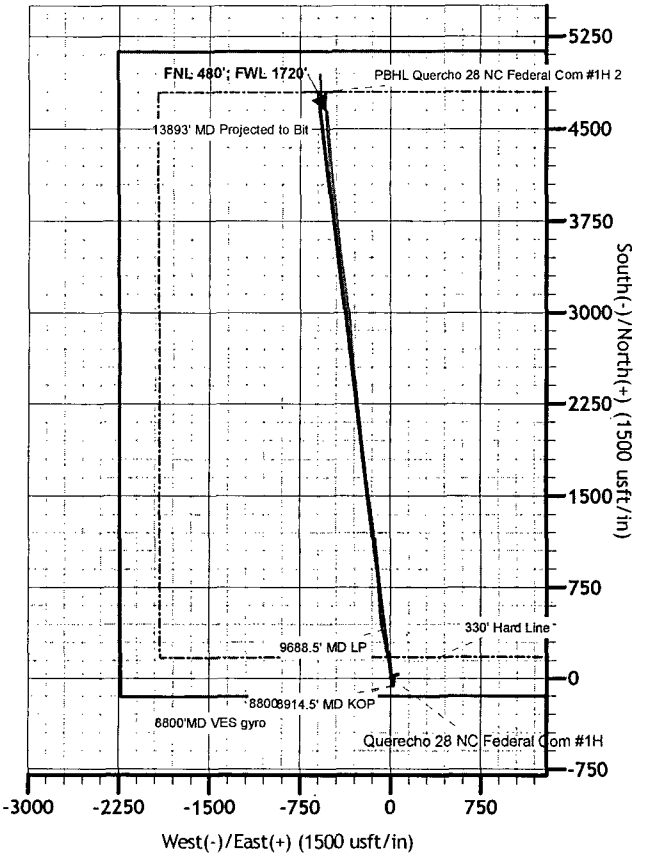
PLAN SECTIONS

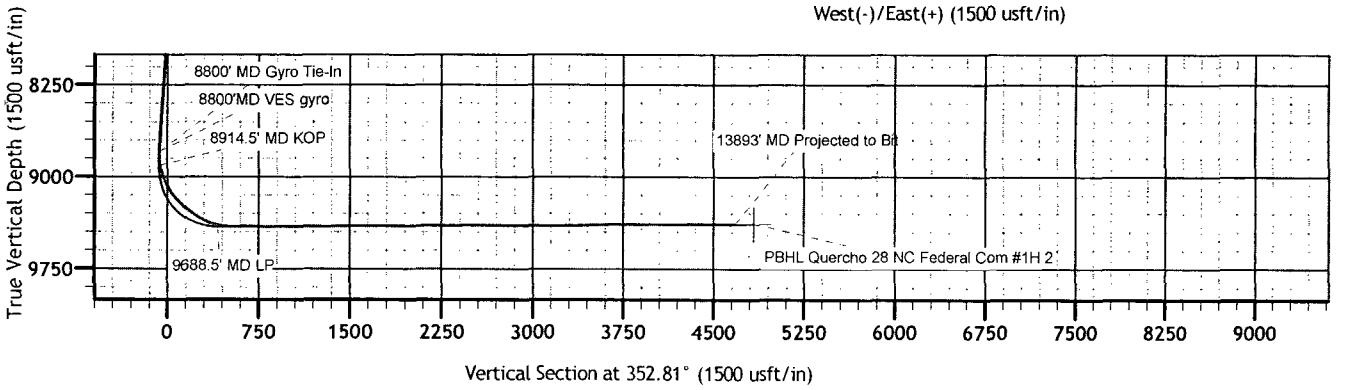
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	8800.0	2.63	186.60	8796.1	-61.2	21.9	0.00	0.00	-63.5	
2	8914.5	2.63	186.60	8910.5	-66.4	21.3	0.00	0.00	-68.6	
3	9688.5	90.33	352.72	9409.1	408.7	-45.0	12.00	166.10	411.1	
4	14114.5	90.33	352.72	9384.0	4799.0	-605.8	0.00	0.00	4837.1	PBHL Quercho 28 NC Federal Com #1H



Azimuths to Grid North
True North: -0.30°
Magnetic North: 7.13°

Magnetic Field
Strength: 48655.5snT
Dip Angle: 60.55°
Date: 10/2/2013
Model: IGRF2010





Mewbourne Oil Company .

Lea County N.M.
Querecho 28 NC Federal Com #1H
Querecho 28 NC Federal Com #1H

OH

Design: OH

Standard Survey Report

14 October, 2013

Stryker Directional
Survey Report

Company:	Mewbourne Oil Company	**Local Co-ordinate Reference:**	Well Querecho 28 NC Federal Com #1H
Project:	Lea County N.M.	**TVD Reference:**	GL 3709 + 20 @ 3729.0usft (Patterson 110)
Site:	Querecho 28 NC Federal Com #1H	**MD Reference:**	GL 3709 + 20 @ 3729.0usft (Patterson 110)
Well:	Querecho 28 NC Federal Com #1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 5000.1 Single User Db

Project Lea County N.M.

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 Querecho 28 NC Federal Com #1H

Site Position:		**Northing:**	623,025.11 usft	**Latitude:**	32° 42' 41.534 N
From:	Map	**Easting:**	672,612.55 usft	**Longitude:**	103° 46' 19.689 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.30 °

Well Querecho 28 NC Federal Com #1H

Well Position	**+N/-S**	0.0 usft	**Northing:**	623,025.11 usft	**Latitude:**	32° 42' 41.534 N
	+E/-W	0.0 usft	**Easting:**	672,612.55 usft	**Longitude:**	103° 46' 19.689 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,709.0 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/2/2013	7.43	60.55	48,655

Design OH

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	352.81

Survey Program **Date** 10/14/2013

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	8,800.0	Ves Gyro Survey #1 (OH)	GyroFlex	
8,870.0	13,893.0	MWD Survey #2 (OH)	MWD	MWD - Standard

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.16	276.82	100.0	0.0	-0.1	0.0	0.16	0.16	0.00
200.0	0.13	257.72	200.0	0.0	-0.4	0.1	0.06	-0.03	-19.10
300.0	0.25	215.60	300.0	-0.2	-0.6	-0.1	0.18	0.12	-42.12
400.0	0.05	191.50	400.0	-0.4	-0.8	-0.3	0.21	-0.20	-24.10
500.0	0.03	114.38	500.0	-0.5	-0.7	-0.4	0.05	-0.02	-77.12
600.0	0.10	70.79	600.0	-0.4	-0.6	-0.4	0.08	0.07	-43.59
700.0	0.14	26.55	700.0	-0.3	-0.5	-0.2	0.10	0.04	-44.24
800.0	0.03	28.96	800.0	-0.2	-0.4	-0.1	0.11	-0.11	2.41
900.0	0.13	30.61	900.0	-0.1	-0.4	0.0	0.10	0.10	1.65

Stryker Directional
Survey Report

Company:	Mewbourne Oil Company	**Local Co-ordinate Reference:**	Well Querecho 28 NC Federal Com #1H
Project:	Lea County N.M.	**TVD Reference:**	GL 3709 + 20 @ 3729.0usft (Patterson 110)
Site:	Querecho 28 NC Federal Com #1H	**MD Reference:**	GL 3709 + 20 @ 3729.0usft (Patterson 110)
Well:	Querecho 28 NC Federal Com #1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,000.0	0.19	32.31	1,000.0	0.2	-0.2	0.2	0.06	0.06	1.70
1,100.0	0.23	33.86	1,100.0	0.5	0.0	0.5	0.04	0.04	1.55
1,200.0	0.24	35.30	1,200.0	0.8	0.2	0.8	0.01	0.01	1.44
1,300.0	0.18	26.24	1,300.0	1.1	0.4	1.1	0.07	-0.06	-9.06
1,400.0	0.58	40.94	1,400.0	1.7	0.8	1.5	0.41	0.40	14.70
1,500.0	0.44	47.28	1,500.0	2.3	1.4	2.1	0.15	-0.14	6.34
1,600.0	0.84	76.63	1,600.0	2.7	2.4	2.4	0.50	0.40	29.35
1,700.0	0.75	92.61	1,700.0	2.9	3.8	2.4	0.24	-0.09	15.98
1,800.0	0.72	78.00	1,800.0	3.0	5.1	2.3	0.19	-0.03	-14.61
1,900.0	0.56	69.18	1,900.0	3.3	6.1	2.5	0.19	-0.16	-8.82
2,000.0	0.70	64.01	2,000.0	3.7	7.1	2.8	0.15	0.14	-5.17
2,100.0	1.17	54.56	2,099.9	4.6	8.5	3.5	0.49	0.47	-9.45
2,200.0	1.98	52.34	2,199.9	6.2	10.7	4.8	0.81	0.81	-2.22
2,300.0	2.26	52.62	2,299.8	8.5	13.6	6.7	0.28	0.28	0.28
2,400.0	2.58	50.13	2,399.7	11.1	16.9	8.9	0.34	0.32	-2.49
2,500.0	2.41	46.79	2,499.6	14.0	20.2	11.4	0.22	-0.17	-3.34
2,600.0	2.24	45.06	2,599.6	16.8	23.1	13.8	0.18	-0.17	-1.73
2,700.0	1.88	45.20	2,699.5	19.4	25.7	16.0	0.36	-0.36	0.14
2,800.0	1.74	58.16	2,799.5	21.3	28.1	17.6	0.43	-0.14	12.96
2,900.0	1.29	58.82	2,899.4	22.7	30.4	18.7	0.45	-0.45	0.66
3,000.0	1.32	59.24	2,999.4	23.9	32.3	19.6	0.03	0.03	0.42
3,100.0	1.30	78.74	3,099.4	24.7	34.4	20.2	0.44	-0.02	19.50
3,200.0	1.28	74.17	3,199.3	25.2	36.6	20.4	0.10	-0.02	-4.57
3,300.0	1.13	71.44	3,299.3	25.8	38.6	20.8	0.16	-0.15	-2.73
3,400.0	1.14	72.82	3,399.3	26.4	40.5	21.2	0.03	0.01	1.38
3,500.0	1.01	72.87	3,499.3	27.0	42.3	21.5	0.13	-0.13	0.05
3,600.0	1.29	72.93	3,599.3	27.6	44.2	21.8	0.28	0.28	0.06
3,700.0	1.11	75.83	3,699.2	28.1	46.2	22.1	0.19	-0.18	2.90
3,800.0	1.20	82.32	3,799.2	28.5	48.2	22.3	0.16	0.09	6.49
3,900.0	0.93	76.84	3,899.2	28.8	50.0	22.4	0.29	-0.27	-5.48
4,000.0	1.14	73.20	3,999.2	29.3	51.8	22.6	0.22	0.21	-3.64
4,100.0	1.00	65.97	4,099.2	30.0	53.5	23.0	0.19	-0.14	-7.23
4,200.0	0.88	68.73	4,199.2	30.6	55.0	23.5	0.13	-0.12	2.76
4,300.0	0.83	69.82	4,299.1	31.1	56.4	23.8	0.05	-0.05	1.09
4,400.0	0.76	73.56	4,399.1	31.6	57.7	24.1	0.09	-0.07	3.74
4,500.0	0.64	71.62	4,499.1	31.9	58.9	24.3	0.12	-0.12	-1.94
4,600.0	0.46	70.02	4,599.1	32.2	59.8	24.5	0.18	-0.18	-1.60
4,700.0	0.61	65.99	4,699.1	32.6	60.7	24.7	0.15	0.15	-4.03
4,800.0	0.32	58.09	4,799.1	33.0	61.4	25.0	0.30	-0.29	-7.90
4,900.0	0.45	68.13	4,899.1	33.2	62.0	25.2	0.15	0.13	10.04
5,000.0	0.54	76.64	4,999.1	33.5	62.8	25.4	0.12	0.09	8.51
5,100.0	0.51	80.25	5,099.1	33.7	63.7	25.4	0.04	-0.03	3.61
5,200.0	0.46	90.73	5,199.1	33.8	64.6	25.4	0.10	-0.05	10.48

Stryker Directional
Survey Report

Company:	Mewbourne Oil Company	**Local Co-ordinate Reference:**	Well Querecho 28 NC Federal Com #1H
Project:	Lea County N.M.	**TVD Reference:**	GL 3709 + 20 @ 3729.0usft (Patterson 110)
Site:	Querecho 28 NC Federal Com #1H	**MD Reference:**	GL 3709 + 20 @ 3729.0usft (Patterson 110)
Well:	Querecho 28 NC Federal Com #1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.0	0.09	95.13	5,299.1	33.7	65.1	25.3	0.37	-0.37	4.40
5,400.0	0.28	100.27	5,399.1	33.7	65.4	25.2	0.19	0.19	5.14
5,500.0	0.26	204.87	5,499.1	33.4	65.5	25.0	0.43	-0.02	104.60
5,600.0	1.63	256.04	5,599.1	32.9	64.0	24.6	1.48	1.37	51.17
5,700.0	2.01	254.61	5,699.0	32.1	61.0	24.2	0.38	0.38	-1.43
5,800.0	2.12	256.35	5,799.0	31.2	57.5	23.7	0.13	0.11	1.74
5,900.0	2.12	251.42	5,898.9	30.2	53.9	23.2	0.18	0.00	-4.93
6,000.0	2.25	249.52	5,998.8	28.9	50.3	22.4	0.15	0.13	-1.90
6,100.0	2.31	253.36	6,098.7	27.6	46.6	21.6	0.16	0.06	3.84
6,200.0	1.75	252.87	6,198.7	26.6	43.2	21.0	0.56	-0.56	-0.49
6,300.0	1.68	254.05	6,298.6	25.7	40.3	20.5	0.08	-0.07	1.18
6,400.0	1.45	251.33	6,398.6	24.9	37.7	20.0	0.24	-0.23	-2.72
6,500.0	1.26	248.75	6,498.6	24.1	35.5	19.5	0.20	-0.19	-2.58
6,600.0	1.26	256.49	6,598.5	23.5	33.4	19.1	0.17	0.00	7.74
6,700.0	1.30	250.82	6,698.5	22.8	31.2	18.8	0.13	0.04	-5.67
6,800.0	1.27	249.29	6,798.5	22.1	29.1	18.3	0.05	-0.03	-1.53
6,900.0	1.12	243.71	6,898.5	21.3	27.2	17.7	0.19	-0.15	-5.58
7,000.0	1.80	235.70	6,998.4	19.9	25.0	16.6	0.71	0.68	-8.01
7,100.0	1.11	228.31	7,098.4	18.4	23.0	15.4	0.71	-0.69	-7.39
7,200.0	0.69	192.14	7,198.4	17.2	22.2	14.3	0.69	-0.42	-36.17
7,300.0	1.12	157.17	7,298.4	15.7	22.4	12.8	0.68	0.43	-34.97
7,400.0	1.13	149.21	7,398.4	13.9	23.3	10.9	0.16	0.01	-7.96
7,500.0	1.72	148.34	7,498.3	11.8	24.6	8.6	0.59	0.59	-0.87
7,600.0	1.85	146.46	7,598.3	9.2	26.3	5.8	0.14	0.13	-1.88
7,700.0	2.51	158.55	7,698.2	5.8	28.0	2.3	0.80	0.66	12.09
7,800.0	3.20	171.08	7,798.1	1.0	29.2	-2.7	0.93	0.69	12.53
7,900.0	3.34	184.90	7,897.9	-4.6	29.4	-8.3	0.80	0.14	13.82
8,000.0	3.55	199.66	7,997.8	-10.5	28.1	-13.9	0.91	0.21	14.76
8,100.0	3.48	192.71	8,097.6	-16.3	26.4	-19.5	0.43	-0.07	-6.95
8,200.0	3.73	189.22	8,197.4	-22.5	25.2	-25.5	0.33	0.25	-3.49
8,300.0	4.47	189.88	8,297.1	-29.6	24.0	-32.3	0.74	0.74	0.66
8,400.0	4.39	184.43	8,396.8	-37.2	23.1	-39.8	0.43	-0.08	-5.45
8,500.0	3.94	180.52	8,496.5	-44.5	22.7	-47.0	0.53	-0.45	-3.91
8,600.0	3.41	181.56	8,596.3	-50.9	22.6	-53.3	0.53	-0.53	1.04
8,700.0	2.91	184.18	8,696.2	-56.4	22.3	-58.7	0.52	-0.50	2.62
8,800.0	2.63	186.60	8,796.1	-61.2	21.9	-63.5	0.30	-0.28	2.42
8,914.0	9.50	358.50	8,909.7	-54.4	21.3	-56.6	10.62	6.03	150.79
8,959.0	15.80	353.20	8,953.5	-44.6	20.5	-46.8	14.22	14.00	-11.78
9,004.0	20.40	346.00	8,996.3	-30.9	17.9	-32.9	11.35	10.22	-16.00
9,049.0	24.60	346.40	9,037.9	-14.1	13.8	-15.7	9.34	9.33	0.89
9,094.0	30.20	349.40	9,077.8	6.1	9.5	4.9	12.81	12.44	6.67
9,139.0	32.80	352.00	9,116.2	29.3	5.7	28.4	6.52	5.78	5.78
9,184.0	37.40	353.60	9,153.0	55.0	2.5	54.2	10.42	10.22	3.56

Company:	Mewbourne Oil Company	**Local Co-ordinate Reference:**	Well Querecho 28 NC Federal Com #1H
Project:	Lea County N.M.	**TVD Reference:**	GL 3709 + 20 @ 3729.0usft (Patterson 110)
Site:	Querecho 28 NC Federal Com #1H	**MD Reference:**	GL 3709 + 20 @ 3729.0usft (Patterson 110)
Well:	Querecho 28 NC Federal Com #1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,229.0	42.40	353.40	9,187.5	83.6	-0.8	83.1	11.11	11.11	-0.44
9,274.0	46.30	352.00	9,219.7	114.8	-4.8	114.5	8.93	8.67	-3.11
9,319.0	50.10	350.80	9,249.7	148.0	-9.8	148.1	8.67	8.44	-2.67
9,364.0	52.80	349.40	9,277.7	182.7	-15.9	183.2	6.47	6.00	-3.11
9,409.0	54.50	349.40	9,304.4	218.3	-22.5	219.4	3.78	3.78	0.00
9,455.0	57.90	349.60	9,330.0	255.9	-29.5	257.5	7.40	7.39	0.43
9,500.0	62.20	349.40	9,352.4	294.2	-36.6	296.5	9.56	9.56	-0.44
9,545.0	68.80	348.00	9,371.1	334.3	-44.6	337.3	14.94	14.67	-3.11
9,590.0	74.00	348.30	9,385.4	376.1	-53.4	379.8	11.57	11.56	0.67
9,635.0	79.80	350.30	9,395.6	419.1	-61.5	423.5	13.60	12.89	4.44
9,680.0	83.80	352.00	9,402.0	463.1	-68.3	468.0	9.64	8.89	3.78
9,709.0	88.00	352.70	9,404.1	491.8	-72.2	496.9	14.68	14.48	2.41
9,791.0	91.40	355.40	9,404.5	573.3	-80.7	578.9	5.29	4.15	3.29
9,823.0	91.00	356.90	9,403.9	605.2	-82.8	610.8	4.85	-1.25	4.69
9,855.0	90.80	356.20	9,403.4	637.2	-84.8	642.8	2.27	-0.63	-2.19
9,886.0	89.60	356.20	9,403.3	668.1	-86.8	673.7	3.87	-3.87	0.00
9,918.0	89.30	356.10	9,403.6	700.0	-89.0	705.6	0.99	-0.94	-0.31
9,949.0	88.80	356.20	9,404.1	730.9	-91.0	736.6	1.64	-1.61	0.32
9,981.0	88.30	356.20	9,404.9	762.9	-93.2	768.5	1.56	-1.56	0.00
10,044.0	89.30	355.20	9,406.2	825.7	-97.9	831.4	2.24	1.59	-1.59
10,076.0	89.20	354.60	9,406.6	857.5	-100.7	863.4	1.90	-0.31	-1.88
10,139.0	90.90	355.00	9,406.6	920.3	-106.4	926.4	2.77	2.70	0.63
10,234.0	91.10	354.30	9,404.9	1,014.8	-115.3	1,021.3	0.77	0.21	-0.74
10,329.0	89.00	354.10	9,404.8	1,109.4	-124.9	1,116.3	2.22	-2.21	-0.21
10,423.0	90.50	352.40	9,405.2	1,202.7	-135.9	1,210.3	2.41	1.60	-1.81
10,518.0	91.00	351.50	9,404.0	1,296.7	-149.3	1,305.2	1.08	0.53	-0.95
10,613.0	91.50	351.80	9,401.9	1,390.7	-163.0	1,400.2	0.61	0.53	0.32
10,707.0	90.50	352.20	9,400.3	1,483.8	-176.1	1,494.2	1.15	-1.06	0.43
10,801.0	90.70	350.30	9,399.3	1,576.7	-190.4	1,588.1	2.03	0.21	-2.02
10,896.0	89.70	353.10	9,399.0	1,670.7	-204.1	1,683.1	3.13	-1.05	2.95
10,991.0	89.70	352.50	9,399.5	1,764.9	-216.0	1,778.1	0.63	0.00	-0.63
11,085.0	89.30	351.50	9,400.3	1,858.0	-229.1	1,872.1	1.15	-0.43	-1.06
11,180.0	90.40	354.30	9,400.5	1,952.3	-240.9	1,967.1	3.17	1.16	2.95
11,275.0	90.60	353.80	9,399.7	2,046.8	-250.7	2,062.0	0.57	0.21	-0.53
11,370.0	90.80	353.20	9,398.5	2,141.1	-261.5	2,157.0	0.67	0.21	-0.63
11,466.0	90.40	353.60	9,397.5	2,236.5	-272.5	2,253.0	0.59	-0.42	0.42
11,560.0	90.10	353.20	9,397.1	2,329.9	-283.3	2,347.0	0.53	-0.32	-0.43
11,655.0	89.90	352.90	9,397.1	2,424.2	-294.8	2,442.0	0.38	-0.21	-0.32
11,748.0	89.30	352.90	9,397.8	2,516.5	-306.3	2,535.0	0.65	-0.65	0.00
11,843.0	90.90	355.40	9,397.6	2,611.0	-316.0	2,630.0	3.12	1.68	2.63
11,938.0	90.30	355.20	9,396.6	2,705.6	-323.8	2,724.9	0.67	-0.63	-0.21
12,033.0	90.20	355.40	9,396.2	2,800.3	-331.5	2,819.8	0.24	-0.11	0.21
12,128.0	89.40	354.80	9,396.5	2,895.0	-339.7	2,914.7	1.05	-0.84	-0.63
12,223.0	89.00	353.60	9,397.9	2,989.5	-349.3	3,009.7	1.33	-0.42	-1.26

Company:	Mewbourne Oil Company	**Local Co-ordinate Reference:**	Well Querecho 28 NC Federal Com #1H
Project:	Lea County N.M.	**TVD Reference:**	GL 3709 + 20 @ 3729.0usft (Patterson 110)
Site:	Querecho 28 NC Federal Com #1H	**MD Reference:**	GL 3709 + 20 @ 3729.0usft (Patterson 110)
Well:	Querecho 28 NC Federal Com #1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,318.0	90.20	352.70	9,398.5	3,083.8	-360.6	3,104.7	1.58	1.26	-0.95
12,412.0	89.90	351.80	9,398.4	3,176.9	-373.3	3,198.7	1.01	-0.32	-0.96
12,506.0	91.30	351.80	9,397.5	3,269.9	-386.7	3,292.6	1.49	1.49	0.00
12,601.0	90.90	350.60	9,395.6	3,363.8	-401.2	3,387.6	1.33	-0.42	-1.26
12,696.0	93.00	352.70	9,392.4	3,457.7	-415.0	3,482.5	3.13	2.21	2.21
12,790.0	92.20	353.40	9,388.1	3,550.9	-426.3	3,576.4	1.13	-0.85	0.74
12,885.0	90.20	354.10	9,386.1	3,645.4	-436.7	3,671.3	2.23	-2.11	0.74
12,980.0	89.80	353.80	9,386.1	3,739.8	-446.7	3,766.3	0.53	-0.42	-0.32
13,075.0	89.80	352.70	9,386.5	3,834.2	-457.9	3,861.3	1.16	0.00	-1.16
13,170.0	90.70	355.20	9,386.1	3,928.6	-467.9	3,956.3	2.80	0.95	2.63
13,265.0	90.30	354.50	9,385.2	4,023.2	-476.4	4,051.2	0.85	-0.42	-0.74
13,359.0	90.00	354.50	9,385.0	4,116.8	-485.4	4,145.2	0.32	-0.32	0.00
13,454.0	90.10	354.50	9,384.9	4,211.4	-494.5	4,240.1	0.11	0.11	0.00
13,549.0	90.30	354.60	9,384.6	4,305.9	-503.5	4,335.1	0.24	0.21	0.11
13,644.0	90.40	354.60	9,384.0	4,400.5	-512.5	4,430.1	0.11	0.11	0.00
13,739.0	90.60	354.80	9,383.2	4,495.1	-521.3	4,525.0	0.30	0.21	0.21
13,834.0	87.10	355.40	9,385.1	4,589.7	-529.4	4,619.9	3.74	-3.68	0.63
13,848.0	87.00	355.00	9,385.8	4,603.7	-530.5	4,633.9	2.94	-0.71	-2.86
13,893.0	87.00	355.00	9,388.1	4,648.4	-534.5	4,678.8	0.00	0.00	0.00
PBHL Querecho 28 NC Federal Com #1H 2 - PBHL Querecho 28 NC Federal Com #1H									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
8,800.0	8,796.1	-61.2	21.9	8800'MD VES gyro
13,893.0	9,388.1	4,648.4	-534.5	13893' MD Projected to Bit

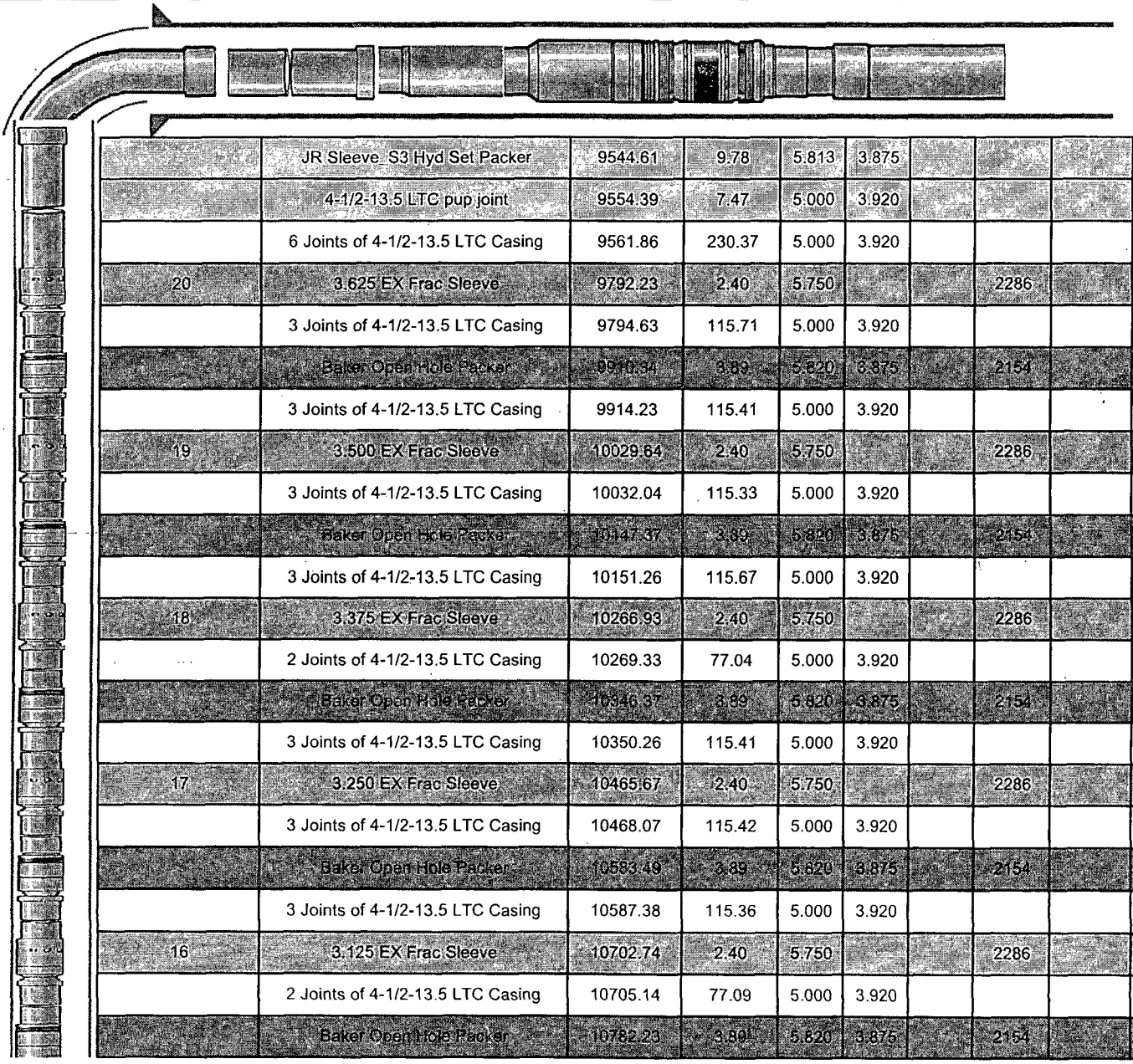
Operating Company	Mewbourne	**Company Rep**	Gary Sutton		
Well Name & Number	NC Fed Com 1H	**Field**	Querecho 28		
Sales Ticket Number	5863314	**BOT Service Rep**	John Davis		
Date	10/13/2013	**District Location**	Odessa, Texas, USA		

BAKER HUGHES

	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	P-110	6.276	6.151	LT&C	0.03826	9,757.00	9,960	6,230
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,338.39	4,525	10,680
Bott Liner										

TVD	9,388.00	KOP	8,830.00	Open Hole	6.125	Casing Vol. (bbl)	312.0
Carry Fluid Weight (ppg)	8.8	Propant Content (ppa)		Max Drill Out Size	#REF!		

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press.	Max Rate (BPM)	Displ (BBL)
Liner Top	1	JR Setting Sleeve_RH Profile	9544.61							



Zone Length										
	JR Sleeve_S3 Hyd Set Packer	9544.61	9.78	5.813	3.875				
	4-1/2-13.5 LTC pup joint	9554.39	7.47	5.000	3.920				
	6 Joints of 4-1/2-13.5 LTC Casing	9561.86	230.37	5.000	3.920				
20	3.625 EX Frac Sleeve	9792.23	2.40	5.750			2286		
	3 Joints of 4-1/2-13.5 LTC Casing	9794.63	115.71	5.000	3.920				
	Baker Open Hole Packer	9910.34	3.89	5.820	3.875		2154		
	3 Joints of 4-1/2-13.5 LTC Casing	9914.23	115.41	5.000	3.920				
19	3.500 EX Frac Sleeve	10029.64	2.40	5.750			2286		
	3 Joints of 4-1/2-13.5 LTC Casing	10032.04	115.33	5.000	3.920				
	Baker Open Hole Packer	10147.37	3.89	5.820	3.875		2154		
	3 Joints of 4-1/2-13.5 LTC Casing	10151.26	115.67	5.000	3.920				
18	3.375 EX Frac Sleeve	10266.93	2.40	5.750			2286		
	2 Joints of 4-1/2-13.5 LTC Casing	10269.33	77.04	5.000	3.920				
	Baker Open Hole Packer	10346.37	3.89	5.820	3.875		2154		
	3 Joints of 4-1/2-13.5 LTC Casing	10350.26	115.41	5.000	3.920				
17	3.250 EX Frac Sleeve	10465.67	2.40	5.750			2286		
	3 Joints of 4-1/2-13.5 LTC Casing	10468.07	115.42	5.000	3.920				
	Baker Open Hole Packer	10583.49	3.89	5.820	3.875		2154		
	3 Joints of 4-1/2-13.5 LTC Casing	10587.38	115.36	5.000	3.920				
16	3.125 EX Frac Sleeve	10702.74	2.40	5.750			2286		
	2 Joints of 4-1/2-13.5 LTC Casing	10705.14	77.09	5.000	3.920				
	Baker Open Hole Packer	10782.23	3.89	5.820	3.875		2154		

Operating Company	Mewbourne	**Company Rep**	Gary Sutton
Well Name & Number	NC Fed Com 1H	**Field**	Querecho 28
Sales Ticket Number	5863314	**BOT Service Rep**	John Davis
Date	10/13/2013	**District Location**	Odessa, Texas, USA

BAKER HUGHES

	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	P-110	6.276	6.151	LT&C	0.03826	9,757.00	9,960	6,230
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,338.39	4,525	10,680
Bott Liner										

TVD	9,388.00	KOP	8,830.00	Open Hole	6.125	Casing Vol. (bbl)	312.0

Carry Fluid Weight (ppg)	8.8	Propant Content (ppa)		Max Drill Out Size	#REF!

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press.	Max Rate (BPM)	Displ. (BBL)
		3 Joints of 4-1/2-13.5 LTC Casing	10786.12	115.55	5.000	3.920				
15	15	3.000 EX Frac sleeve	10901.67	2.40	5.750			2286		
		2 Joints of 4-1/2-13.5 LTC Casing	10904.07	77.07	5.000	3.920				
		Baker Open Hole Packer	10981.14	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	10985.03	115.58	5.000	3.920				
14	14	2.875 EX Frac Sleeve	11100.61	2.40	5.750			2286		
		3 Joints of 4-1/2-13.5 LTC Casing	11103.01	115.43	5.000	3.920				
		Baker Open Hole Packer	11218.44	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	11222.33	115.53	5.000	3.920				
13	13	2.750 EX Frac Sleeve	11337.86	2.40	5.750			2286		
		2 Joints of 4-1/2-13.5 LTC Casing	11340.26	76.19	5.000	3.920				
		Baker Open Hole Packer	11416.45	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	11420.34	115.46	5.000	3.920				
12	12	2.625 EX Frac Sleeve	11535.80	2.40	5.750			2286		
		3 Joints of 4-1/2-13.5 LTC Casing	11538.20	115.79	5.000	3.920				
		Baker Open Hole Packer	11653.99	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	11657.88	115.59	5.000	3.920				
11	11	2.500 EX Frac Sleeve	11773.47	2.40	5.750			2286		
		2 Joints of 4-1/2-13.5 LTC Casing	11775.87	77.19	5.000	3.920				
		Baker Open Hole Packer	11853.06	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	11856.95	115.58	5.000	3.920				
10	10	2.375 EX Frac Sleeve	11972.53	2.40	5.750			2286		
		3 Joints of 4-1/2-13.5 LTC Casing	11974.93	115.76	5.000	3.920				
		Baker Open Hole Packer	12090.69	3.89	5.820	3.875		2154		
		3 Joint of 4-1/2-13.5 LTC Casing	12094.58	115.57	5.000	3.920				
9	9	2.250 EX Frac Sleeve	12210.15	2.40	5.750			2286		

Operating Company	Mewbourne	**Company Rep**	Gary Sutton
Well Name & Number	NC Fed Com 1H	**Field**	Querecho 28
Sales Ticket Number	5863314	**BOT Service Rep**	John Davis
Date	10/13/2013	**District Location**	Odessa, Texas, USA

BAKER HUGHES

	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	P-110	6.276	6.151	LT&C	0.03826	9,757.00	9,960	6,230
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,338.39	4,525	10,680
Bott Liner										

TVD	9,388.00	KOP	8,830.00	Open Hole	6.125	Casing Vol. (bbl)	312.0
Carry Fluid Weight (ppg)	8.8	Propant Content (ppa)				Max Drill Out Size	#REF!

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press.	Max Rate (BPM)	Displ (BBL)
		3 Joints of 4-1/2-13.5 LTC Casing	12212.55	115.49	5.000	3.920				
		Baker Open Hole Packer	12328.04	3.89	5.820	3.875		2154		
		3 Joint of 4-1/2-13.5 LTC Casing	12331.93	115.31	5.000	3.920				
8	8	2.125 EX Frac Sleeve	12447.24	2.40	5.750			2286		
		3 Joints of 4-1/2-13.5 LTC Casing	12449.64	115.40	5.000	3.920				
		Baker Open Hole Packer	12565.04	3.89	5.820	3.875		2154		
		3 Joint of 4-1/2-13.5 LTC Casing	12568.93	115.17	5.000	3.920				
7	7	2.000 EX Frac Sleeve	12684.10	2.40	5.750			2286		
		3 Joints of 4-1/2-13.5 LTC Casing	12686.50	114.37	5.000	3.920				
		Baker Open Hole Packer	12800.87	3.89	5.820	3.875		2154		
		2 Joint of 4-1/2-13.5 LTC Casing	12804.76	76.62	5.000	3.920				
6	6	1.875 EX Frac Sleeve	12881.38	2.40	5.750			2286		
		3 Joints of 4-1/2-13.5 LTC Casing	12883.78	115.50	5.000	3.920				
		Baker Open Hole Packer	12999.28	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	13003.17	115.81	5.000	3.920				
5	5	1.750 EX Frac Sleeve	13118.98	2.40	5.750			2286		
		3 Joint of 4-1/2-13.5 LTC Casing	13121.38	115.38	5.000	3.920				
		Baker Open Hole Packer	13236.76	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	13240.65	115.35	5.000	3.920				
4	4	1.625 EX Frac Sleeve	13356.00	2.40	5.750			2286		
		2 Joints of 4-1/2-13.5 LTC Casing	13358.40	77.02	5.000	3.920				
		Baker Open Hole Packer	13435.42	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	13439.31	115.83	5.000	3.920				
3	3	1.500 DBL Ball Frac Sleeve	13555.14	2.40	5.750			2286		
		2 Joint of 4-1/2-13.5 LTC Casing	13557.54	73.62	5.000	3.920				
		Baker Open Hole Packer	13631.16	3.89	5.820	3.875		2154		

Operating Company	Mewbourne	**Company Rep**	Gary Sutton		
Well Name & Number	NC Fed Com 1H	**Field**	Querecho 28		
Sales Ticket Number	5863314	**BOT Service Rep**	John Davis		
Date	10/13/2013	**District Location**	Odessa, Texas, USA		

BAKER HUGHES

	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	P-110	6.276	6.151	LT&C	0.03826	9,757.00	9,960	6,230
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,338.39	4,525	10,680
Bott Liner										

TVD	9,388.00	KOP	8,830.00	Open Hole	6.125	Casing Vol. (bbl)	312.0
Carry Fluid Weight (ppg)	8.8	Propant Content (ppa)		Max Drill Out Size	#REF!		

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press.	Max Rate (BPM)	Displ. (BBL)
		2 Joints of 4-1/2-13.5 LTC Casing	13635.05	76.95	5.000	3.920				
2	2	1.375 DBL Ball Frac Sleeve	13712.00	2.40	5.750			2286		
		2 Joints of 4-1/2-13.5 LTC Casing	13714.40	75.26	5.000	3.920				
		Baker Open Hole Packer	13789.66	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	13793.55	76.71	5.000	3.920				
1	1	1.250 Ball Seat	13870.26	2.39	5.000	3.920		3048		
		Pup Joint	13872.65	8.08	5.000	3.920				
		Float Shoe	13880.73	2.27						
			13883.00							