

Schlumberger

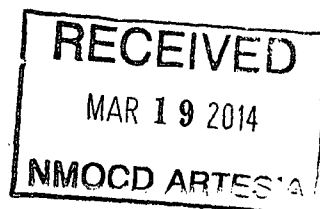
Schlumberger Technology Corporation
1325 S Dairy Ashford, Rm 5012
Houston, TX 77077
281-285-6262

Date: March 17, 2014

State of New Mexico
Oil Conservation Division
District 2 - ARTESIA
811 S. First St.
Artesia, NM 88210

Attention: T.C. Shaffert

Company Name: Occidental Permian LTD
Well Name: McHam 34 State 003
County: Eddy
State: New Mexico
API number: 30-015-41232

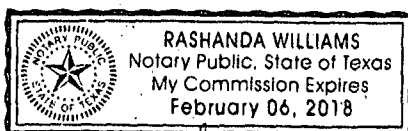


Enclosed please find the original copy of the Continuous Direction Survey performed by Schlumberger Wireline & Testing and Data Services, divisions of Schlumberger Technology Corporation (P-5 No. 754900). The Continuous Directional Survey was calculated from GPIT Survey data, and processed by Elizabeth Rosborough, PetroTechnical Services located in DS-Houston. 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>
Elizabeth Rosborough Geology Tech	1	0 ft – 5258 ft	Mar. 17, 2014	GPIT

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address or call (281) 285-6262.

Elizabeth Rosborough
Elizabeth Rosborough
Geology Tech
Enclosures



Rashanda Williams March 17, 2014

Schlumberger

McHam 34 State 003

General Information:

Company Name:	Occidental Permian LTD
Field:	Artesia
Well:	McHam 34 State 003
County:	Eddy
State:	New Mexico
Surface Location:	1226' FNL & 1593' FEL
Latitude:	32.789 deg N
Longitude:	104.160 deg W
API Number	30-015-41232
Logging Engineer:	T.Amzen / C. Cruz
Processed By:	Elizabeth Rosborough
Service Order Number:	CGU8-00054
Job Number:	DSP-2014-08146
Date Logged:	13-Mar-2014
Date Processed:	17-Mar-2014

Bottom Hole Location:

Measured Depth	True Vertical Depth	North/South Drift	East/West Drift	Closure Distance	Closure Direction
Ft	Ft	Ft	Ft	Ft	Deg
5258.00	5256.51	81.13	-40.71	90.77	333.35

Schlumberger

GEOFRAME PROCESSED INTERPRETATION

Certified Directional Survey

0'MD - 5258' MD

*A Mark of Schlumberger

Using the following logs: GPIT-F

COMPANY: Occidental Permian LTD
WELL: McHam 34 State 003
FIELD: Artesia
County: Eddy
State: New Mexico
COUNTRY: USA
Date Logged: 13-Mar-2014 Date Processed: 17-Mar-2014
Well Location: 1226' FNL & 1593' FEL

Elevations: KB: 3688.2ft DF: 3687.2ft GL: 3674.2ft
API Number: 30-015-41232 Job Number: DSP-2014-08146

FOLD HERE The well name, location and borehole reference data were furnished by the customer.

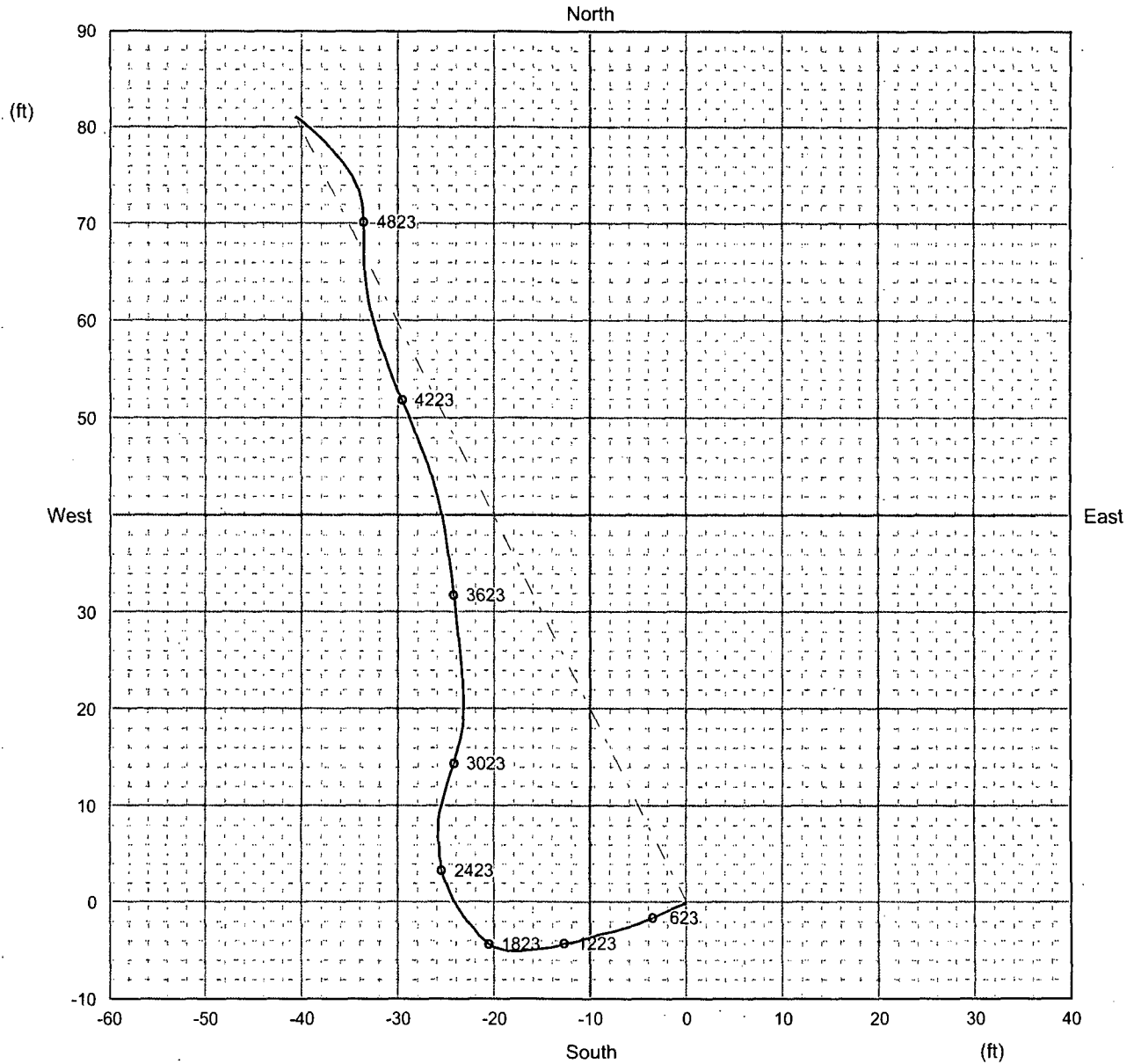
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretations made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

Field Recording:	Location: Roswell, NM	Software Version: 20C0-999	Engineer:
Office Recording:	ICS Center: Houston	Baseline:	Log Analyst: E. Rosborough
Mud and Borehole Measurements:			
Rm @ Measured Temperature: 0.08ohm.m @ 60degF	BHT:	102degF	Bitsize: 7.875in
Rmf @ Measured Temperature: 0.06ohm.m @ 68degF	Type Fluid in Hole:		WATER
Rmc @ Measured Temperature: 0.11ohm.m @ 68degF	Mud Density:	9.7lbm/gal	

Remarks:

0' MD - 400' MD in Casing....Assumed Vertical
GPIT Data Good at 473' MD
Grid Convergence Angle = 0.455 deg

McHam 34 State 003



Projection on Horizontal Plane

Horizontal scale 1 in : 16 ft

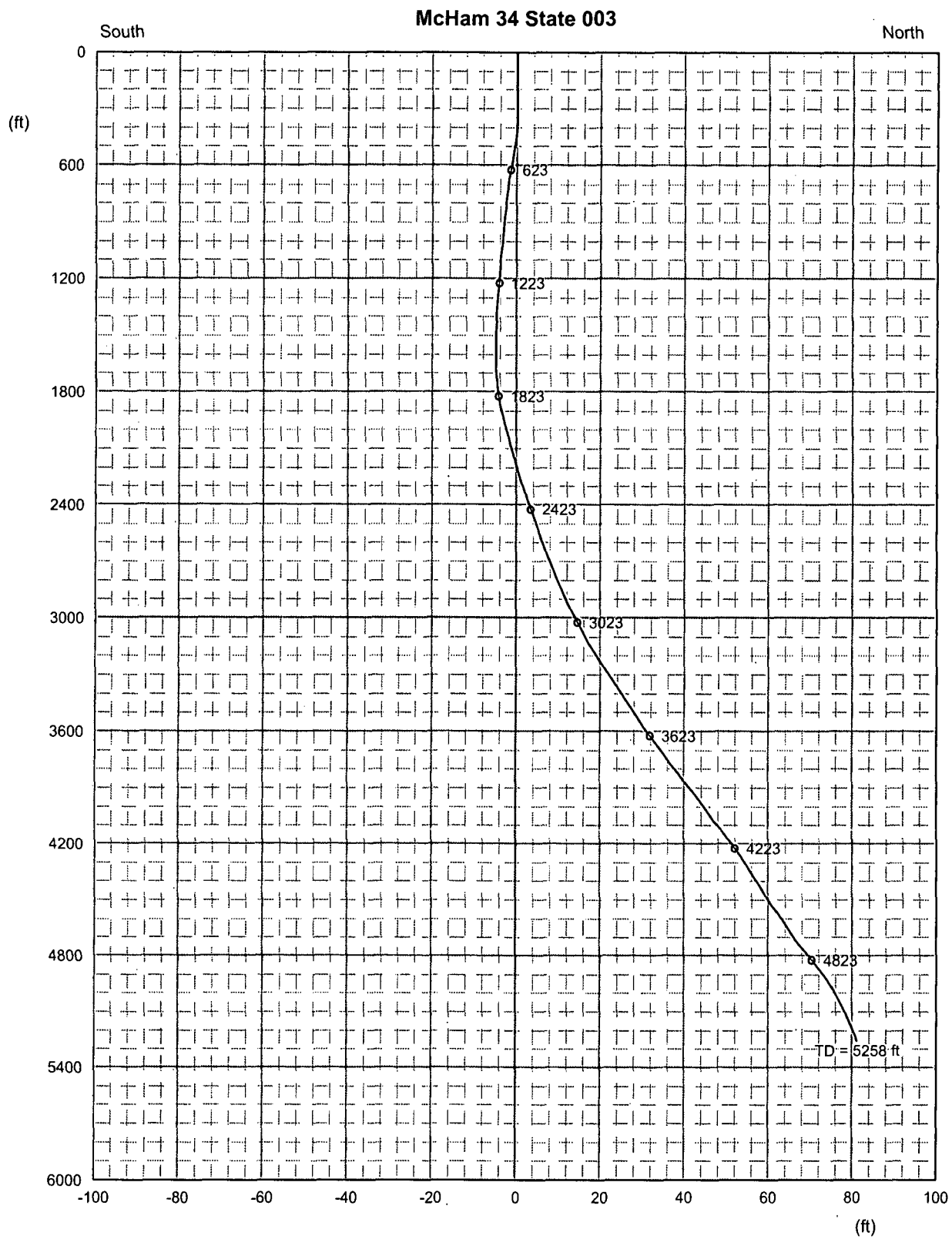
Minimum Curvature Method

Tie In Location

Measured Depth	400.00	ft
True Vertical Depth	400.00	ft
Distance North	0.00	ft
Distance East	0.00	ft

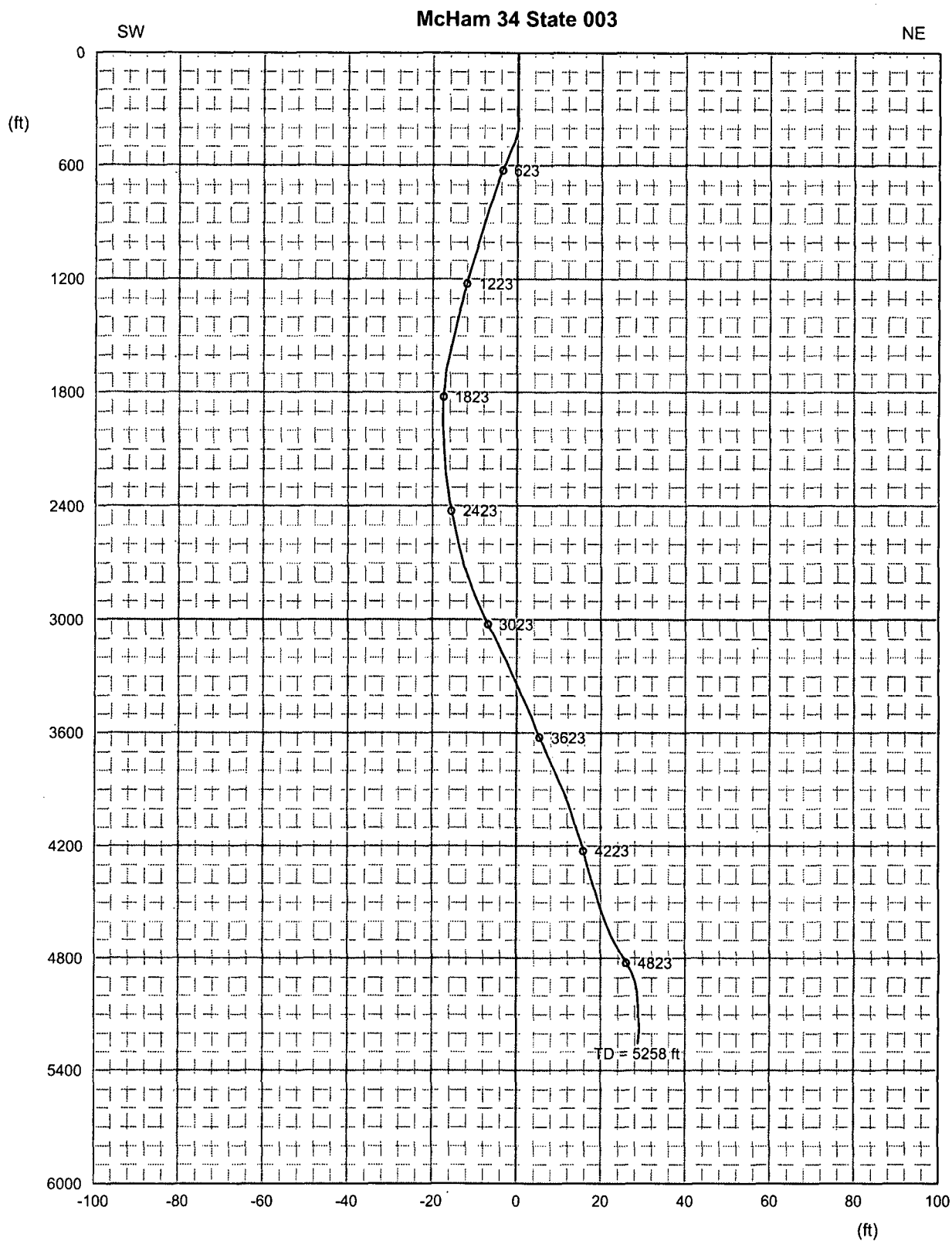
Bottom Hole Location

Measured Depth	5258.00	ft
True Vertical Depth	5256.51	ft
Distance North	81.13	ft
Distance East	-40.71	ft
Closure Distance	90.77	ft
Closure Direction	333.35	deg



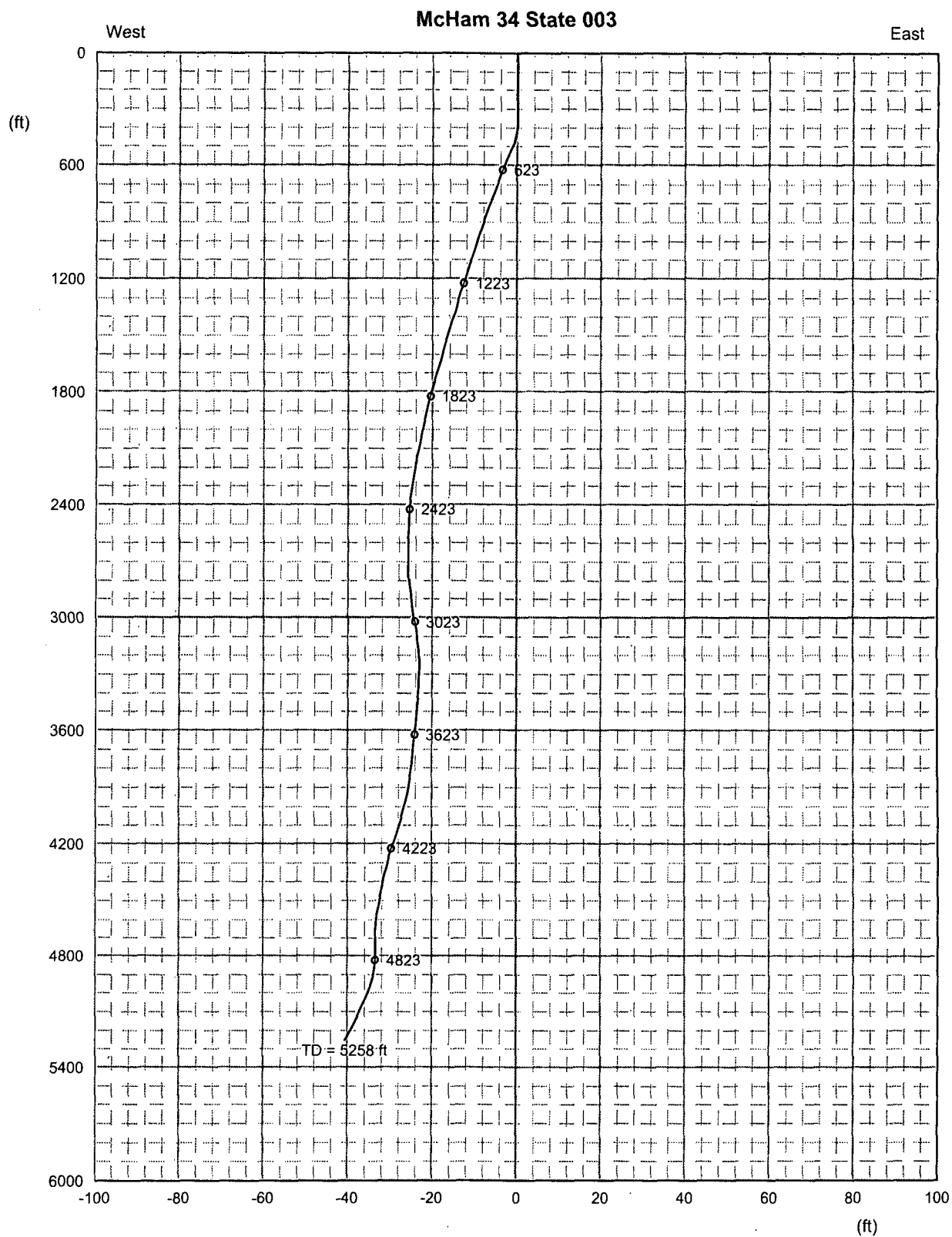
Projection on Vertical Plane

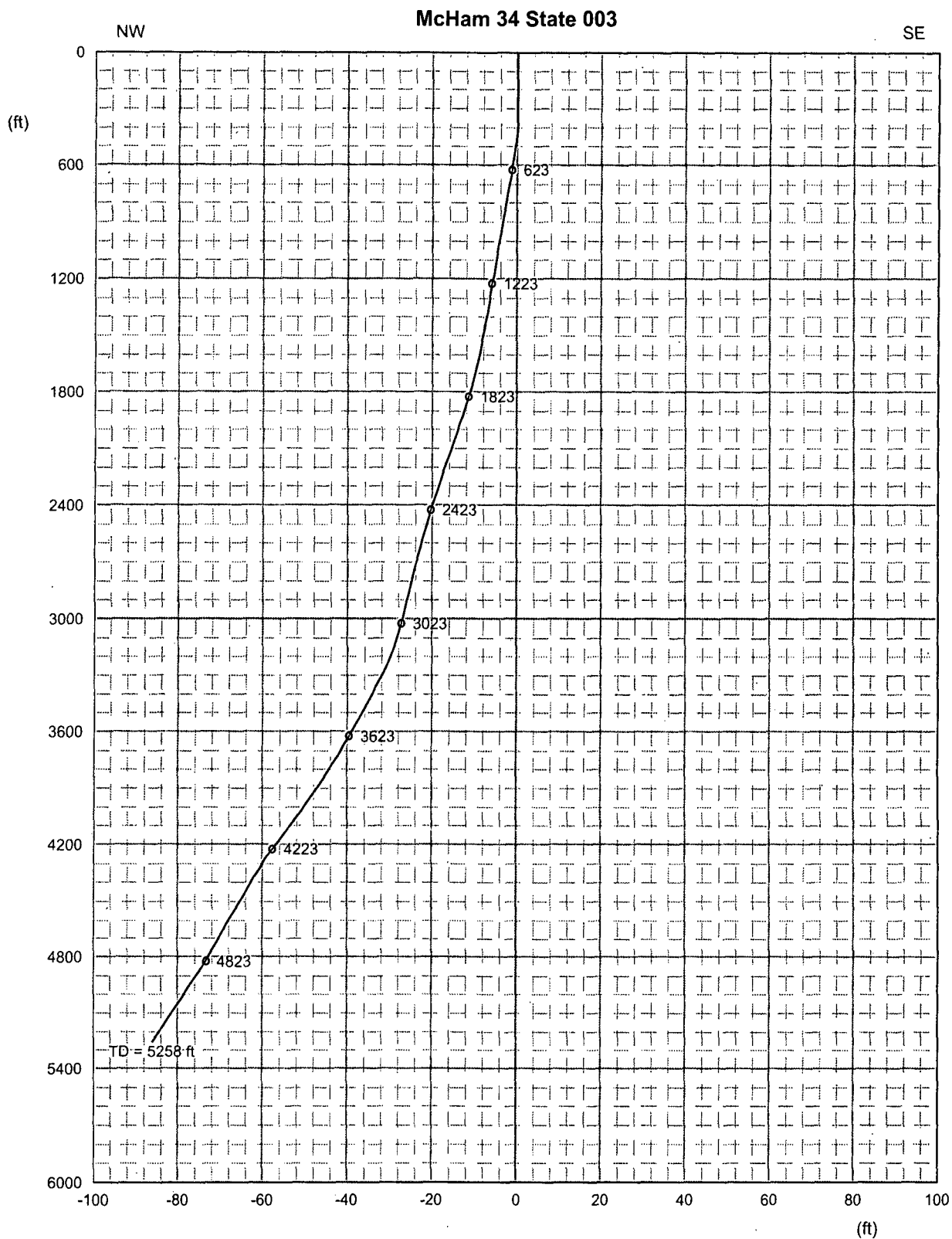
Vertical scale 1 in : 750 , Horizontal scale 1 in : 33 ft



Projection on Vertical Plane

Vertical scale 1 in : 750 , Horizontal scale 1 in : 33 ft





Projection on Vertical Plane

Vertical scale 1 in : 750 , Horizontal scale 1 in : 33 ft

MD (ft)	TVD (ft)	DEVI (deg)	AZIM (deg)	DX (ft)	DY (ft)
0.00	0.00	0.00	0.00	0.00	0.00
400.00	400.00	0.00	0.00	0.00	0.00
473.00	472.99	1.27	245.81	-0.74	-0.33
523.00	522.98	1.20	245.99	-1.72	-0.77
573.00	572.97	1.11	246.46	-2.64	-1.18
623.00	622.96	1.11	245.66	-3.53	-1.57
673.00	672.95	1.02	246.28	-4.38	-1.95
723.00	722.95	0.97	256.41	-5.20	-2.23
773.00	772.94	1.03	248.99	-6.03	-2.49
823.00	822.93	0.85	256.26	-6.81	-2.74
873.00	872.93	1.01	251.12	-7.58	-2.97
923.00	922.92	0.86	259.56	-8.37	-3.18
973.00	972.91	0.91	251.70	-9.11	-3.37
1023.00	1022.91	0.88	258.19	-9.86	-3.57
1073.00	1072.90	0.80	250.75	-10.57	-3.77
1123.00	1122.90	0.88	257.51	-11.28	-3.97
1173.00	1172.89	0.86	258.24	-12.02	-4.13
1223.00	1222.89	0.81	256.19	-12.73	-4.29
1273.00	1272.88	0.84	256.45	-13.44	-4.46
1323.00	1322.88	0.70	253.76	-14.08	-4.63
1373.00	1372.87	0.80	262.34	-14.72	-4.76
1423.00	1422.87	0.81	263.01	-15.42	-4.85
1473.00	1472.86	0.79	263.79	-16.11	-4.93
1523.00	1522.86	0.74	263.02	-16.78	-5.01
1573.00	1572.85	0.75	267.34	-17.43	-5.06
1623.00	1622.85	0.74	272.23	-18.07	-5.07
1673.00	1672.84	0.74	279.11	-18.71	-5.00
1723.00	1722.84	0.75	285.93	-19.35	-4.86
1773.00	1772.84	0.79	293.65	-19.98	-4.63
1823.00	1822.83	0.75	298.82	-20.58	-4.34
1873.00	1872.83	0.81	316.33	-21.11	-3.92
1923.00	1922.82	0.86	313.55	-21.63	-3.41
1973.00	1972.82	0.86	324.59	-22.12	-2.84
2023.00	2022.81	0.88	319.19	-22.59	-2.25
2073.00	2072.80	0.91	328.40	-23.05	-1.62
2123.00	2122.80	0.83	322.39	-23.47	-1.00
2173.00	2172.79	0.92	326.60	-23.92	-0.37
2223.00	2222.79	0.95	333.92	-24.32	0.33
2273.00	2272.78	0.87	340.92	-24.63	1.06
2323.00	2322.77	0.89	332.54	-24.93	1.77
2373.00	2372.77	0.99	339.87	-25.26	2.52
2423.00	2422.76	0.94	348.06	-25.49	3.33
2473.00	2472.75	0.93	354.00	-25.62	4.13
2523.00	2522.75	0.95	351.07	-25.73	4.94

2573.00	2572.74	0.84	359.69	-25.79	5.72
2623.00	2622.73	1.00	356.71	-25.82	6.52
2673.00	2672.73	1.00	357.72	-25.86	7.39
2723.00	2722.72	1.05	1.10	-25.87	8.28
2773.00	2772.71	1.13	10.93	-25.77	9.23
2823.00	2822.70	1.13	18.98	-25.51	10.18
2873.00	2872.69	1.19	12.93	-25.24	11.15
2923.00	2922.68	1.28	15.92	-24.97	12.20
2973.00	2972.66	1.34	17.69	-24.63	13.30
3023.00	3022.65	1.41	18.88	-24.26	14.43
3073.00	3072.63	1.45	13.33	-23.91	15.63
3123.00	3122.62	1.55	14.58	-23.60	16.90
3173.00	3172.60	1.63	6.92	-23.34	18.26
3223.00	3222.58	1.64	1.21	-23.24	19.69
3273.00	3272.56	1.67	358.22	-23.25	21.14
3323.00	3322.53	1.74	356.73	-23.31	22.62
3373.00	3372.51	1.76	355.80	-23.41	24.14
3423.00	3422.49	1.78	354.10	-23.55	25.68
3473.00	3472.46	1.77	353.29	-23.72	27.22
3523.00	3522.44	1.73	352.68	-23.91	28.74
3573.00	3572.42	1.76	353.93	-24.08	30.25
3623.00	3622.39	1.87	353.41	-24.26	31.82
3673.00	3672.36	1.90	353.41	-24.45	33.45
3723.00	3722.34	1.89	351.91	-24.66	35.09
3773.00	3772.31	1.92	350.30	-24.91	36.73
3823.00	3822.28	2.02	350.89	-25.19	38.42
3873.00	3872.25	2.06	348.49	-25.51	40.18
3923.00	3922.22	2.06	345.85	-25.91	41.93
3973.00	3972.19	2.00	342.96	-26.39	43.63
4023.00	4022.16	1.94	339.44	-26.94	45.25
4073.00	4072.12	2.08	339.09	-27.56	46.89
4123.00	4122.09	2.10	338.57	-28.22	48.59
4173.00	4172.06	2.11	336.78	-28.92	50.29
4223.00	4222.03	2.01	335.97	-29.64	51.94
4273.00	4272.00	1.89	336.74	-30.32	53.50
4323.00	4321.97	1.76	339.72	-30.91	54.97
4373.00	4371.95	1.71	339.74	-31.43	56.39
4423.00	4421.93	1.65	342.38	-31.91	57.77
4473.00	4471.91	1.61	342.15	-32.34	59.13
4523.00	4521.89	1.80	345.90	-32.75	60.56
4573.00	4571.86	1.80	349.03	-33.09	62.09
4623.00	4621.84	1.79	350.89	-33.36	63.63
4673.00	4671.81	1.64	356.55	-33.53	65.12
4723.00	4721.79	1.95	0.79	-33.56	66.69
4773.00	4771.76	2.08	0.34	-33.54	68.45
4823.00	4821.73	2.11	358.06	-33.57	70.27

4873.00	4871.69	2.04	352.52	-33.72	72.07
4923.00	4921.66	1.86	336.93	-34.15	73.70
4973.00	4971.64	1.77	328.50	-34.87	75.10
5023.00	5021.62	1.66	321.85	-35.72	76.33
5073.00	5071.60	1.63	317.70	-36.65	77.43
5123.00	5121.58	1.67	317.57	-37.61	78.49
5173.00	5171.55	1.68	313.79	-38.63	79.53
5223.00	5221.53	1.81	305.33	-39.81	80.49
5255.00	5253.52	1.81	305.33	-40.63	81.08
5258.00	5256.51	1.81	305.33	-40.71	81.13
MD (ft)	TVD (ft)	DEVI (deg)	AZIM (deg)	DX (ft)	DY (ft)

COMPANY: Occidental Permian LTD
 WELL: McHam 34 State 003
 FIELD: Artesia
 STATE: New Mexico
 COUNTRY: USA
 Date Logged: 13-Mar-2014 Date Processed: 17-Mar-2014
 Well Location: 1226' FNL & 1593' FEL

Elevations: K.B. 3688.2 ft D.F. 3687.2 ft G.L. 3674
 API Number: 30-015-41232 Job Number: DSP-2014-0814

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0770
District II
811 S. First St., Artesia, NM 88210
Phone: (505) 748-1383 Fax: (505) 748-9720
District III
1000 Rio Puerco Road, Aztec, NM 87410
Phone: (505) 334-6175 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-41232	Pool Code 96830	Pool Name Artesia; Glorieta- Yaso
Property Code 309600	Property Name MCHAM "34" STATE	Well Number 3
OGRID No. 157984	Operator Name OCCIDENTAL PERMIAN LIMITED PARTNERSHIP	Elevation 3674.2'

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	34	17 SOUTH	28 EAST, N.M.P.M.		1226'	NORTH	1593'	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

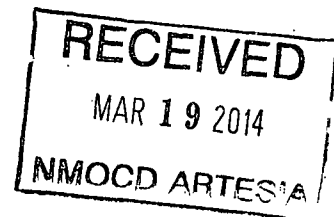
	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Amid Quint</i> 3/21/13 Signature <i>Jennifer Duarte</i> Printed Name jennifer.duarte@oxy.com Email Address
	SURVEYOR CERTIFICATION I hereby certify that the information shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. <i>TERRY J. ASH</i> Signature and Seal Professional Surveyor 15079 AUGUST 2, 2013 Date of Survey Certificate Number 15079 WOL 120807WL-0 (KA)

Schlumberger

Schlumberger Technology Corporation
1325 S Dairy Ashford, Rm 5012
Houston, TX 77077
281-285-6262

March 17, 2014

State of New Mexico
Oil Conservation Division
District 2 - ARTESIA
811 S. First St.
Artesia, NM 88210



Attention: T.C. Shaffert

I, Elizabeth Rosborough, certify that I am employed by Schlumberger Technology Corporation; that I did on the day of 17 March, 2014 conduct or supervise the computation of a CONTINUOUS DIRECTIONAL SURVEY. The Continuous Directional Survey was conducted from a depth of 0 feet to a depth of 5258 feet. I certify that the data is true, correct, complete and within the limitations of the tool as set forth by Schlumberger Technology Corporation. I am authorized and qualified to make this report; and this survey was conducted at the request of Occidental Permian LTD for the well McHam 34 State 003, API Number 30-015-41232, located in Eddy County, New Mexico. I have reviewed this report and find that it conforms to the principles and procedures as set forth by Schlumberger Technology Corporation.

Signature: Elizabeth Rosborough

Name: Elizabeth Rosborough

Job Title: Geology Tech.

District I
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Phone:(575) 748-1283 Fax:(575) 748-9720

District III
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Phone:(505) 334-4178 Fax:(505) 334-4170

District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-101
August 1, 2011
Permit 164561

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address OCCIDENTAL PERMIAN LTD PO Box 4294 Houston, TX 77210		2. OGRD Number 157984
		3. API Number 30-015-41232
4. Property Code 309600	5. Property Name MCHAM 34 STATE	6. Well No. 003

7. Surface Location

UL - Lot	Section	Township	Range	Lot 1/4	Feet From	N/S Line	Feet From	E/W Line	County
B	34	17S	28E	B	1226	N	1539	E	EDDY

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot 1/4	Feet From	N/S Line	Feet From	E/W Line	County
B	34	17S	28E	B	1226	N	1593	E	Eddy

9. Pool Information

ARTESIA; GLORIETA-YESO (O)	96836
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable Rotary	14. Lease Type State	15. Ground Level Elevation 3674
16. Multiple N	17. Proposed Depth 5300	18. Formation Yeso Formation	19. Contractor	20. Spud Date 6/10/2013
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Type	Casing Weight/lb	Setting Depth	Sacks of Cement	Estimated TOC
Surf	14.75	11.75	42	450	390	0
Int1	10.625	8.625	32	1800	520	0
Prod	7.875	5.5	17	5300	860	0

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
DoubleRam	3000	3000	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable. Signature: Printed Name: Electronically filed by KAREN M SINARD Title: Email Address: karen_sinard@oxy.com Date: 3/25/2013	OIL CONSERVATION DIVISION	
	Approved By: Randy Dade	
	Title: District Supervisor	
	Approved Date: 3/26/2013	Expiration Date: 3/26/2015
	Date: 3/25/2013 Phone: 713-366-3485 Conditions of Approval Attached	

Permit Comments

Operator: OCCIDENTAL PERMIAN LTD , 157984

Well: MCHAM 34 STATE #003

API: 30-015-41232

Created By	Comment	Comment Date
CSHAPARD	Land p/S	3/26/2013

Permit Conditions of Approval

Operator: OCCIDENTAL PERMIAN LTD , 157984

Well: MCHAM 34 STATE #003

API: 30-015-41232

OCD Reviewer	Condition
CSHAPARD	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string

APD DATA - DRILLING PLAN -

OPERATOR NAME / NUMBER: Occidental Permian LP

157984

LEASE NAME / NUMBER: McHam 34 State # 3

STATE: NM

COUNTY: Eddy

SURFACE LOCATION: 1226' FNL & 1593' FEL, Sec 34, T17S, R28E

Surface Location: LAT: 32.7950407 N LONG: 104.1601626 W X: 553213.7 Y: 652990.4 NAD: 27

C-102 PLAT APPROX GR ELEV: 3674.2' EST KB ELEV: 3688.2' (14' KB)

1. GEOLOGIC NAME OF SURFACE FORMATION:

a. Permian

2. ESTIMATED TOPS OF GEOLOGICAL MARKERS & DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Formation	TV Depth Top	Expected Fluids
Rustler	276	Fresh Water
Top of Salt	438	-
Base of Salt	460	-
Yates	535	-
Seven Rivers	750	-
Queen	1370	-
Grayburg	1820	Oil
San Andres	2150	Oil/Water
Glorietta	3700	Oil
Paddock	3840	Oil
Blinberry	4310	Oil
TD	5300	Oil

A. Fresh Water formation is outcropping and will be covered with the 16" conductor pipe, which will be set at 80' prior to spud.

GREATEST PROJECTED TD: 5300' MD/ 5300' TVD OBJECTIVE: Yeso

3. CASING PROGRAM: (All casing is in NEW condition)

Surface Casing: 11 3/4" casing set at $\pm$ 450' MD/ 450' TVD in a 14 3/4" hole filled with 8.40 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'- 450'	450'	42	H-40	ST&C	1070	1980	307	11.084	10.928	7.06	3.27	18.64

Intermediate Casing: 8 5/8" casing set at $\pm$ 1800' MD / 1800' TVD in a 10 5/8" hole filled with 9.6 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'- 1800'	1800'	32	J-55	LT&C	2530	3930	417	7.921	7.875 SD	3.52	1.86	8.49

Production Casing: 5.5" casing set at $\pm$ 5300' MD / 5300' TVD in a 7 7/8" hole filled with 9.6 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'- 5300'	5300'	17	J-55	LT&C	4910	5320	247	4.892	4.767	1.86	2.51	3.21

Collapse and burst loads calculated using Stress Check with actual anticipated loads.

4. CEMENT PROGRAM:

Surface Interval

Interval	Amount sx	Ft of Fill	Type	Gal/Sk	PPG	Ft ³ /sk	24 Hr Comp
Surface (TOC: 0' - 450')							
Lead: 0' - <u>450'</u> (150 % Excess)	390	450'	Premium Plus Cement, with 1% Calcium Chloride - Flake	6.36	14.80	1.34	1608 psi

Intermediate Interval

Interval	Amount sx	Ft of Fill	Type	Gal/Sk	PPG	Ft ³ /sk	24 Hr Comp
Intermediate (TOC: 0' - 1800')							
Lead: 0' - 1200' (150 % Excess)	280	1200'	Halliburton Light Premium Plus, with 5 lbm/sk Salt, 5 lbm/sk Kol-Seal	9.72	12.9	1.9	655 psi
Tail: 1200' - <u>1800'</u> (150 % Excess)	240	600'	Premium Plus Cement	6.34	14.8	1.33	1914 psi

Production Interval

Interval	Amount sx	Ft of Fill	Type	Gal/Sk	PPG	Ft ³ /sk	24 Hr Comp
Production (TOC: 0' - 5300')							
Lead: 0' - 2800' (100 % Excess)	290	2800'	Interfill C, with 0.4 % HR-800, 0.25 % D-AIR 5000	14.34	11.9	2.48	327 psi
Tail: 2800' - <u>5300'</u> (100 % Excess)	570	2500'	Premium Plus, with 0.5% Halad @-344, 0.2 % WellLife 734, 0.3 % Econolite, 0.3 % CFR-3, 5 lbm/sk Microbond	7.72	14.2	1.55	1914 psi

Description of cement additives: Calcium Chloride - Flake (Accelerator), Kol-Seal (Lost Circulation Additive), Interfill C (Cement), HR-800 (Retarder), D-AIR 5000 (Defoamer), Halad @ -344 (Low Fluid Loss Control), WellLife 734 (Cement Enhancer), Microbond (Expander), Econolite (Light Weight Additive), CFR-3 (Dispersant)

5. DIRECTIONAL PLAN

Vertical well

6. PRESSURE CONTROL EQUIPMENT:

Surface: 0 – 450' None.

Intermediate: 0 - 1800' the minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required to drill below the surface casing shoe shall be 3000 (3M) psi. Operator will be using an 11" 3M two ram stack with 3M annular preventer and 3M Choke Manifold.

- a. The 11" 3000 psi blowout prevention equipment will be installed and operational after setting the 11 3/4" surface casing and the 11 3/4" SOW x 13 5/8" 3K conventional wellhead; the rotating head body will be installed but the rubber will be installed when it becomes operationally necessary.
- b. The BOP and ancillary BOPE will be tested by a third party. All equipment will be tested to 250/1386 against the surface casing (70% of casing burst) psi for 30 minutes by a third party and charted.
- c. The pipe rams will be functionally tested every 24 hours; the blind rams will be functionally tested on every trip out of the hole. These functional tests will be documented on the Daily Driller's Log.
- d. Other accessory equipment (BOPE) will include a safety valve and subs as needed to fit all drill strings, and a 2" kill line and 3 " choke line having a 3000 psi WP rating, tested to 3000 psi.

Production: 0 – 5300' will be drilled with an 11" 3M two ram stack with a 3M annular preventer and 3M Choke Manifold.

- a. The BOP and ancillary BOPE will be tested by a third party upon installation to the 8 5/8" intermediate casing. All equipment will be tested to 3000 psi (high) and 250 psi (low) except the annular, which will be tested to 70% of its rated working pressure, 2100 psi (high) and 250 psi (low) for ten minutes each. All test will performed against a test plug with the Section B Wellhead valve open to assure that the test is not being performed against the casing
- b. The pipe rams will be functionally tested every 24 hours; the blind rams will be functionally tested on every trip out of the hole. These functional tests will be documented on the Daily Driller's Log.
- c. Same as above
- d. Same as above
- e. Oxy requests a variance so to use a co-flex line between the BOP and choke manifold. (schematic attached)
Manufacturer: Hebei Ouya Ltd.
Serial Number: 1642343-04
Length: 39" Size: 3" Ends: flanges
WP rating: 3000 psi Anchors required by manufacturer: No
- f. See attached BOP & Choke manifold diagrams.

7. MUD PROGRAM:

Depth	Mud Wt ppg	Vis Sec	Fluid Loss	Type System
0 – 450'	8.4 – 8.9	32 – 34	NC	Fresh Water /Spud Mud
450' – 1800'	9.6 – 10.0	28 – 40	NC	Brine Water
1800' – 5300'	9.6 – 10.0	28 – 40	10-20	Fresh Water /Spud Mud

8. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

- A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor unobstructed and readily accessible at all times.
- Hydrogen Sulfide detection equipment will be in operation after drilling out the surface casing shoe until the production casing is cemented. Breathing equipment will be on location upon drilling the surface casing shoe until total depth is reached. **If Hydrogen Sulfide is encountered, measured amounts and formations will be reported to the NMOCD**

9. POTENTIAL HAZARDS:

- H2S detection and breathing equipment will be in operation after drilling out the surface casing shoe until the production casing has been cemented. If H2S is encountered the operator will comply with Onshore Order #6.
- The bottomhole pressure is anticipated to be 2645 psi. (0.5 psi/ft)
- No abnormal temperatures or pressures are anticipated.
- Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

Road and location construction will begin after the NMOCD has approved the APD. Anticipated spud date will be as soon as possible after location is built. Move in operations and drilling is expected to take 18 days. If production casing is run, then an additional 30 days will be needed to complete the well and construct surface facilities and/or lay flow lines in order to place well on production.

10. MUD AND WIRELINE LOGGING:

- Mud logging: from Intermediate casing to TD.
- Open Hole Logging as follows: Triple Combo from TD to the shoe of the intermediate CSG

COMPANY PERSONNEL:

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