

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTNMOCD
HobbsFORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No. NMNM27506	
2. Name of Operator CHEVRON USA INCORPORATED		6. If Indian, Allottee or Tribe Name	
Contact: DENISE PINKERTON E-Mail: leakejd@chevron.com		7. If Unit or CA/Agreement, Name and/or No.	
3a. Address 15 SMITH ROAD MIDLAND, TX 79705		8. Well Name and No. SALADO DRAW 29 26 33 FED COM 2H	
3b. Phone No. (include area code) Ph: 432-687-7375		9. API Well No. 30-025-42637-00-X1	
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 29 T26S R33E NWNW 200FNL 1308FWL		10. Field and Pool, or Exploratory WC-025 G06 S263319P	
11. County or Parish, and State LEA COUNTY, NM			

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Drilling Operations
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

11-14-2015: SPUD WELL. DRILL SURFACE HOLE 80-860'.
NOTIFIED PAUL FLOWERS @ 15:00 HRS OF INTENT TO RUN CSG.
RUN 13 3/8" 48#, H-40 STC SURFACE CSG SET @ 850' (HOLE SIZE - 17 1/2", ACT TOP=80, ACT BTM=860)
CMT JOB: PUMP 5 BBL DYED FW SPACER TO LOAD LINES @ 8.3PPG.
PRESS TEST TO 500/3000 PSI. BLEED OFF. PMP 40 BBL DYED FW SPACER @ 8.3PPG@5BPM.MIX & PUMP 1006 SX
(238 BBL) CL C TAIL CMT @ 14.8PPG@5 BPM.DISPL CMT W/126.5BBL FW. TOTAL DISP: 122 BBL (CALC
126BBL)BUMP PLUG W/501 PSI OVER FINAL CIRC PRESS @ 829PSI.HELD FOR 5 MINS. FULL RTRNS.FINAL CIRC
PRESS PRIOR TO BUMPING PLUG 328PSI @ 2BPM. 126 BBL/532 SKS OF CMT RETRN TO SURF. CMT IN PLACE @
03:00 HRS 11/15/2015.

12/17/2015: TEST BOPE TO 250 PSI LOW/5000 PSI HIGH.TAG CMT @ 765. TEST CSG TO 1200PSI/30MINS/GOOD.
DRILL INTERMEDIATE 870-1115', 1756, 2184, 2726, 3180, 3336, 3558, 3878, 4057, 4399, 4754, 4810.

14. I hereby certify that the foregoing is true and correct. Electronic Submission #344932 verified by the BLM Well Information System For CHEVRON USA INCORPORATED, sent to the Hobbs Committed to AFMSS for processing by JENNIFER SANCHEZ on 07/18/2016 (16JAS0451SE)	
Name (Printed/Typed) DENISE PINKERTON	Title REGULATORY SPECIALIST
Signature (Electronic Submission)	Date 07/18/2016
THIS SPACE FOR FEDERAL OR STATE OFFICE USE	
Approved By _____	Title _____
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office _____
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.	

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

Additional data for EC transaction #344932 that would not fit on the form

32. Additional remarks, continued

12/20/2015: RUN 9 5/8" 40# LT&C INTERMEDIATE CSG SET @ 4800' (HOLE SIZE - 12 1/4", ACT TOP=860, ACT BTM=4800) TAG BTM @ 4810
12/21/2015: CMT JOB: PRESS FR 500PSI TO 3000 PSI. PMP 35BBL FW SPACER, 470 BBLS LEAD CMT, 110BBL TAIL CMT, PMP 357 BBL FW DISPL, FINAL CIRC PRESS-1279PSI, BMP PLUG @ 1780PSI. WOC 8 HRS. 100 BBLS CMT TO SURF. DRILL 4820-4845, 5651, 6529, 7245, 7761, 8043, 8468, 8699, 8970, 9091, 9302. **WAIT ON ALL ITEMS NEEDED FOR 7 5/8" LINER.

12/26/2015: RUN TENARIS 7 5/8" 29.7# P110 TSH 513 LINER TO 5022'. PLANNED SETTING DEPTHS: FS - 9292, LC - 9194, TOL - 4269. LINER TOP TO BE SET 531' ABOVE INTER CSG SHOE. RUN LINER ON DRILL PIPE 5022-6185, 9292. LINER SET @ 9290'. TAG BTM @ 9302
12/29/2015: CMT JOB: TEST TO 500 PSI LOW/7500 PSI HIGH. PMP 20 BBLS MUD PUSH SPACER @ 10PPG. PMP 194 SX LEAD 1 CMT @ 11.5PPG, PMP 88 SX LEAD 2 CMT @ 12.5PPG. DISPL W/230 BBLS FW & BRINE. PMP 230 BBLS INTO DISPL. (291 BBLS CALC) FINAL CIRC PRESS-605PSI @ 5BBL/MIN. BUMP PLUG @ 3800 PSI. 10 BBLS CMT RETRND TO SURF. CMT IN PLACE @ 13:00. SETTING DEPTHS: FS - 9290, LC - 9195, TOL - 4274, LINER TOP SET 526' ABOVE INTER CSG SHOE. CIRC 350 BBLS TO DISPL AN CMT ABOVE LINER TOP. 10 BBLS CMT RETRND TO SURF.

12/30/2015: TEST BOPE TO 250PSI LOW/5000 PSI HIGH.
12/31/2015: TAG CMT @ 7680. PRESS TEST LINER TO 2800PSI/30 MINS/GOOD.
INITIAL: 2865 PSI, FINAL: 2830 PSI. DRILL CMT 7680-8081, 9194, 9290, 9312, 9383, 10044, 10422, 10705, 10963, 11368, 11747, 12029, 12407, 12785, 13079, 13257, 13351, 13562, 13970, 14108, 14149, 14488, 14700, 14965, 15148, 15432, 15621, 15835, 16125, 16297, 16535.

01/08/2016: RUN 5", 18#, P110 CSG SET @ 16,514'.
01/09/2016: CMT JOB: TEST LINES 500 PSI LOW/6000PSI HIGH. PMP 228 SX 1ST LEAD POZ H CMT @ 11.5PPG, 640 SX 2ND LEAD CMT @ 12.5PPG, 121 SX TAIL CL H CMT @ 15PPG. DISPL W/20BBLS ACETIC ACID, 272 BBLS FW. TOTAL - 292 BBLS. NO CMT TO SURF. FULL RTRNS.
01/10/2016: RIG RELEASED @ 0600 HRS.



Casing Summary

Well Name SALADO DRAW 29-26-33 FED COM 002H	Lease Salado Draw 29-26-33 Fed	Field Name WILDCAT (HOBBS)	Business Unit Mid-Continent
Ground Elevation (ft)	Original RKB (ft)	Current RKB Elevation	Mud Line Elevation (ft) Water Depth (ft)

Surface, Planned?-N, 850ftKB

Set Depth (MD) (ftKB)		Set Tension (kips)		String Nominal OD (in)		String Min Drift (in)		Centralizers		Scratchers	
850				13 3/8		12.583		10			
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)	Len (ft)	P Burst (psi)	P Collapse (psi)
1	Casing Joint	13 3/8	12.715	48.00	H-40	ST&C	-1	-1	0.00		740.0
1	Landing Joint	13 3/8	12.715	48.00	H-40	ST&C	-1	36	36.69		740.0
1	Wellhead	13 3/8	12.715	48.00	H-40	ST&C	36	41	4.63		740.0
1	Pup Joint	13 3/8	12.715	48.00	H-40	ST&C	41	45	4.11		740.0
1	Casing Joint	13 3/8	12.715	48.00	H-40	ST&C	45	88	42.83		740.0
1	Casing Joint	13 3/8	12.715	48.00	H-40	ST&C	88	122	34.47		740.0
18	Casing Joint	13 3/8	12.715	48.00	H-40	ST&C	122	805	683.11		740.0
1	Float Collar	13 3/8	12.715	48.00	H-40	ST&C	805	807	1.37		740.0
1	Casing Joint	13 3/8	12.715	48.00	H-40	ST&C	807	849	41.95		740.0
1	Float Shoe	13 3/8	12.719	48.00	H-40		849	850	1.48	1,730.0	740.0

Intermediate Casing 1, Planned?-N, 4,800ftKB

Set Depth (MD) (ftKB)		Set Tension (kips)		String Nominal OD (in)		String Min Drift (in)		Centralizers		Scratchers	
4,800				9 5/8		8.688		31			
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)	Len (ft)	P Burst (psi)	P Collapse (psi)
1	Casing Joint	9 5/8	8.844	40.00	HCK-55	LT&C	-4	-4	0.00	3,950.0	4,230.0
1	Landing Jt	9 5/8	8.844	40.00	HCK-55	LT&C	-4	34	38.07	3,950.0	4,230.0
1	Hanger & pup	9 5/8	8.844	40.00	HCK-55	LT&C	34	38	4.00	3,950.0	4,230.0
11	Casing Joint	9 5/8	8.844	40.00	HCK-55	LT&C	38	4,709	4,670.98	3,950.0	4,230.0
1	Float Collar	9 5/8	8.844	40.00	HCK-55	LT&C	4,709	4,710	1.48	3,950.0	4,230.0
2	Casing Joint	9 5/8	8.844	40.00	HCK-55	LT&C	4,710	4,798	88.04	3,950.0	4,230.0
1	Float Shoe	9 5/8	8.844	40.00	HCK-55	LT&C	4,798	4,800	1.62		

Drilling Liner 1, Planned?-N, 9,290ftKB

Set Depth (MD) (ftKB)		Set Tension (kips)		String Nominal OD (in)		String Min Drift (in)		Centralizers		Scratchers	
9,290				7 5/8				0			
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)	Len (ft)	P Burst (psi)	P Collapse (psi)
37	5" Drill Pipe	5	2.675	19.50	S-135	4-1/2" IF	-4	3,272	3,276.91		5,350.0
10	5" HWDP	5	2.675			4-1/2" IF	3,272	4,164	891.49		5,350.0
1	5" Drill Pipe	5	2.675	19.50	S-135	4-1/2" IF	4,164	4,253	88.62		5,350.0
1	Setting Tool	7 5/8	6.875	29.70	P-110	TSH 513	4,253	4,267	14.66		5,350.0
1	Versa Flex Hanger	7 5/8	6.875	29.70	P-110	TSH 513	4,267	4,298	30.36		5,350.0
10	Casing Joint	7 5/8	6.875	29.70	P-110	TSH 513	4,298	9,192	4,894.25		5,350.0
1	Landing Collar	7 5/8	6.875	29.70	P-110	TSH 513	9,192	9,194	1.97		5,350.0
1	Casing Joint	7 5/8	6.875	29.70	P-110	TSH 513	9,194	9,241	46.88		5,350.0
1	Float Collar	7 5/8	6.875	29.70	P-110	TSH 513	9,241	9,243	1.98		5,350.0
1	Casing Joint	7 5/8	6.875	29.70	P-110	TSH 513	9,243	9,288	45.74		5,350.0
1	Float Shoe	7 5/8	3.626	19.10	Q-125		9,288	9,290	1.61		21,920.0

Production Casing, Planned?-N, 16,514ftKB

Set Depth (MD) (ftKB)		Set Tension (kips)		String Nominal OD (in)		String Min Drift (in)		Centralizers		Scratchers	
16,514				5							
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)	Len (ft)	P Burst (psi)	P Collapse (psi)
1	Hanger	5	4.276	18.00	P-110	CDC	39	39	0.25		13,470.0
1	Pup Jt	5	4.276	18.00	P-110	CDC	39	42	3.21		13,470.0
1	XO	5	4.276	18.00	P-110	CDC	42	44	1.91		13,470.0
36	Casing Joint	5	4.276	18.00	P-110	Tenaris	44	16,336	16,291.84		13,470.0
1	Pup Jt	5	4.276	18.00	P-110	Tenaris	16,336	16,345	9.07		13,470.0
1	RSI Tool	5	4.276	18.00	P-110	Tenaris	16,345	16,351	6.46		13,470.0
1	Pup Jt	5	4.276	18.00	P-110	Tenaris	16,351	16,361	9.72		13,470.0
1	Casing Joint	5	4.276	18.00	P-110	Tenaris	16,361	16,406	44.92		13,470.0
1	Pup Jt	5	4.276	18.00	P-110	Tenaris	16,406	16,415	9.24		13,470.0
1	Landing collar	5	4.276	18.00	P-110	Tenaris	16,415	16,417	1.46		13,470.0
1	Casing Joint	5	4.276	18.00	P-110	Tenaris	16,417	16,462	45.54		13,470.0



Casing Summary

Well Name SALADO DRAW 29-26-33 FED COM 002H		Lease Salado Draw 29-26-33 Fed	Field Name WILDCAT (HOBBS)	Business Unit Mid-Continent	
Ground Elevation (ft)	Original RKB (ft)	Current RKB Elevation		Mud Line Elevation (ft)	Water Depth (ft)

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Top Depth (MD) (ftKB)	Bin Depth (MD) (ftKB)	Len (ft)	P Burst (psi)	P Collapse (psi)
1	Float collar	5	4.276	18.00	P-110	Tenaris	16,462	16,464	1.52		13,470.0
1	Casing Vib	5	4.276	18.00	P-110	Tenaris	16,464	16,468	2.36		13,470.0
1	Casing Joint	5	4.276	18.00	P-110	Tenaris	16,466	16,512	45.52		13,470.0
1	Float shoe	5	4.276	18.00	P-110	Tenaris	16,512	16,514	2.33		13,470.0



Cement Summary

Production Casing Cement

Well Name SALADO DRAW 29-26-33 FED COM 002H		Lease Salado Draw 29-26-33 Fed	Field Name WILDCAT (HOBBS)	Business Unit Mid-Continent	
Ground Elevation (ft)	Original RKB (ft)	Current RKB Elevation		Mud Line Elevation (ft)	Water Depth (ft)

Original Hole				
Wellbore Name Original Hole	Directional Type Horizontal	Min Kick Off Depth (ftKB) 8,759.0	Vertical Section Direction (°) 182.15	
Hole Size (in)	Act Top (ftKB)		Act Btm (ftKB)	
17 1/2	80.0		860.0	
12 1/4	860.0		4,800.0	
8 3/4	4,820.0		9,302.0	
6 3/4	9,302.0		16,535.0	

VG-Horizontal, Vetco Grey on 12/19/2014 03:30

Sub-Type VG-Horizontal	Install Date 12/19/2014				
Des	Make	Model	WP (psi)	Service	SN

Surface, Planned?-N, 850ftKB

Casing Description Surface	Wellbore Original Hole	Run Date 11/14/2015	Set Depth (MD) (ftKB) 850	Slick Up (ftKB) 0.6	Set Tension (kips)
Centralizers 10	Scratchers				

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Casing Joint	13 3/8	12.715	48.00	H-40		ST&C	0.00	-1	-1
1	Landing Joint	13 3/8	12.715	48.00	H-40		ST&C	36.69	-1	36
1	Wellhead	13 3/8	12.715	48.00	H-40		ST&C	4.63	36	41
1	Pup Joint	13 3/8	12.715	48.00	H-40		ST&C	4.11	41	45
1	Casing Joint	13 3/8	12.715	48.00	H-40		ST&C	42.83	45	88
1	Casing Joint	13 3/8	12.715	48.00	H-40		ST&C	34.47	88	122
18	Casing Joint	13 3/8	12.715	48.00	H-40		ST&C	683.11	122	805
1	Float Collar	13 3/8	12.715	48.00	H-40		ST&C	1.37	805	807
1	Casing Joint	13 3/8	12.715	48.00	H-40		ST&C	41.95	807	849
1	Float Shoe	13 3/8	12.719	48.00	H-40			1.48	849	850

Intermediate Casing 1, Planned?-N, 4,800ftKB

Casing Description Intermediate Casing 1	Wellbore Original Hole	Run Date 12/20/2015	Set Depth (MD) (ftKB) 4,800	Slick Up (ftKB) 4.2	Set Tension (kips)
Centralizers 31	Scratchers				

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Casing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	0.00	-4	-4
1	Landing Jt	9 5/8	8.844	40.00	HCK-55		LT&C	38.07	-4	34
1	Hanger & pup	9 5/8	8.844	40.00	HCK-55		LT&C	4.00	34	38
111	Casing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	4,670.98	38	4,709
1	Float Collar	9 5/8	8.844	40.00	HCK-55		LT&C	1.48	4,709	4,710
2	Casing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	88.04	4,710	4,798
1	Float Shoe	9 5/8	8.844	40.00	HCK-55		LT&C	1.62	4,798	4,800

Drilling Liner 1, Planned?-N, 9,290ftKB

Casing Description Drilling Liner 1	Wellbore Original Hole	Run Date 12/27/2015	Set Depth (MD) (ftKB) 9,290	Slick Up (ftKB) 4.5	Set Tension (kips)
Centralizers 0	Scratchers				

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
37	5" Drill Pipe	5	2.675	19.50	S-135		4-1/2" IF	3,276.91	-4	3,272
10	5" HWDP	5	2.675				4-1/2" IF	891.49	3,272	4,164
1	5" Drill Pipe	5	2.675	19.50	S-135		4-1/2" IF	88.62	4,164	4,253
1	Setting Tool	7 5/8	6.875	29.70	P-110		TSH 513	14.66	4,253	4,267
1	Versa Flex Hanger	7 5/8	6.875	29.70	P-110		TSH 513	30.36	4,267	4,298
108	Casing Joint	7 5/8	6.875	29.70	P-110		TSH 513	4,894.25	4,298	9,192
1	Landing Collar	7 5/8	6.875	29.70	P-110		TSH 513	1.97	9,192	9,194
1	Casing Joint	7 5/8	6.875	29.70	P-110		TSH 513	46.88	9,194	9,241
1	Float Collar	7 5/8	6.875	29.70	P-110		TSH 513	1.98	9,241	9,243
1	Casing Joint	7 5/8	6.875	29.70	P-110		TSH 513	45.74	9,243	9,288
1	Float Shoe	7 5/8	3.626	19.10	Q-125			1.61	9,288	9,290



Cement Summary

Production Casing Cement

Well Name SALADO DRAW 29-26-33 FED COM 002H	Lease Salado Draw 29-26-33 Fed	Field Name WILDCAT (HOBBS)	Business Unit Mid-Continent
Ground Elevation (ft)	Original RKB (ft)	Current RKB Elevation	Mud Line Elevation (ft) Water Depth (ft)

Production Casing, Planned?N, 16,514ftKB

Casing Description Production Casing	Wellbore Original Hole	Run Date 1/8/2016	Set Depth (MD) (ftKB) 16,514	Stick Up (ftKB) -38.7	Set Tension (kips)
Centralizers			Scratchers		

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Blm Depth (MD) (ftKB)
1	Hanger	5	4.276	18.00	P-110		CDC	0.25	39	39
1	Pup Jt	5	4.276	18.00	P-110		CDC	3.21	39	42
1	XO	5	4.276	18.00	P-110		CDC	1.91	42	44
362	Casing Joint	5	4.276	18.00	P-110		Tenaris	16,291.84	44	16,336
1	Pup Jt	5	4.276	18.00	P-110		Tenaris	9.07	16,336	16,345
1	RSI Tool	5	4.276	18.00	P-110		Tenaris	8.48	16,345	16,351
1	Pup Jt	5	4.276	18.00	P-110		Tenaris	9.72	16,351	16,361
1	Casing Joint	5	4.276	18.00	P-110		Tenaris	44.92	16,361	16,406
1	Pup Jt	5	4.276	18.00	P-110		Tenaris	9.24	16,406	16,415
1	Landing collar	5	4.276	18.00	P-110		Tenaris	1.48	16,415	16,417
1	Casing Joint	5	4.276	18.00	P-110		Tenaris	45.54	16,417	16,462
1	Float collar	5	4.276	18.00	P-110		Tenaris	1.52	16,462	16,464
1	Casing Vib	5	4.276	18.00	P-110		Tenaris	2.36	16,464	16,466
1	Casing Joint	5	4.276	18.00	P-110		Tenaris	45.52	16,466	16,512
1	Float shoe	5	4.276	18.00	P-110		Tenaris	2.33	16,512	16,514

Production Casing Cement, Casing, 1/9/2016 21:00

Cementing Start Date 1/9/2016	Cementing End Date 1/10/2016	Wellbore Original Hole
Evaluation Method Returns to Surface	Cement Evaluation Results Good returns.	
Comment		

1, 32.6-16,535.0ftKB

Top Depth (ftKB) 32.6	Bottom Depth (ftKB) 16,535.0	Full Return? N	Vol Cement Ret (bbl) Y	Top Plug? Y	Bottom Plug? Y
Initial Pump Rate (bbl/min) 4.5	Final Pump Rate (bbl/min) 7.7	Avg Pump Rate (bbl/min) 5.6	Final Pump Pressure (psi) 2,562.0	Plug Bump Pressure (psi) 3,062.0	
Pipe Reciprocated? N	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)	Pipe Rotated? N	Pipe RPM (rpm)	
Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)	Drill Out Diameter (in)	Drill Out Date	

Spacer

Fluid Type Spacer	Fluid Description MPE spacer	Quantity (sacks) 30.0	Class H	Volume Pumped (bbl) 30.0
Estimated Top (ftKB) 3,513.0	Estimated Bottom Depth (ftKB) 3,513.0	Percent Excess Pumped (%) 35.0	Yield (ft ³ /sack) 2.65	Fluid Mix Ratio (gal/sack) 15.53
Free Water (%) 10.00	Density (lb/gal) 10.00	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

Lead

Fluid Type Lead	Fluid Description Poz-H	Quantity (sacks) 228	Class H	Volume Pumped (bbl) 108.0
Estimated Top (ftKB) 3,513.0	Estimated Bottom Depth (ftKB) 7,462.0	Percent Excess Pumped (%) 35.0	Yield (ft ³ /sack) 2.65	Fluid Mix Ratio (gal/sack) 15.53
Free Water (%) 11.50	Density (lb/gal) 11.50	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

Lead

Fluid Type Lead	Fluid Description TXI	Quantity (sacks) 640	Class H	Volume Pumped (bbl) 182.0
Estimated Top (ftKB) 7,462.0	Estimated Bottom Depth (ftKB) 14,744.0	Percent Excess Pumped (%) 35.0	Yield (ft ³ /sack) 1.60	Fluid Mix Ratio (gal/sack) 8.63
Free Water (%) 12.50	Density (lb/gal) 12.50	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc



Cement Summary

Production Casing Cement

Well Name SALADO DRAW 29-26-33 FED COM 002H	Lease Salado Draw 29-26-33 Fed	Field Name WILDCAT (HOBBS)	Business Unit Mid-Continent
Ground Elevation (ft)	Original RKB (ft)	Current RKB Elevation	Mud Line Elevation (ft) Water Depth (ft)

Tail

Fluid Type Tail	Fluid Description Class H	Quantity (sacks) 121	Class H	Volume Pumped (bbl) 47.0
Estimated Top (ftKB) 14,744.0	Estimated Bottom Depth (ftKB) 16,535.0	Percent Excess Pumped (%) 35.0	Yield (ft ³ /sack) 2.18	Fluid Mix Ratio (gal/sack) 9.54
Free Water (%)	Density (lb/gal) 15.00	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

Displacement

Fluid Type Displacement	Fluid Description 20 bbls Acetic Acid	Quantity (sacks)	Class	Volume Pumped (bbl) 292.0
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft ³ /sack)	Fluid Mix Ratio (gal/sack)
Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

**Phoenix Technology Services
SURVEY DATA CERTIFICATION**



PHOENIX JOB NUMBER 1514334

OPERATOR Chevron

WELL NAME Salado Draw 29-26-33 Fed Com 2H

COUNTY & STATE

Lea County, NM

API WELL NUMBER 30-025-42637

PROPOSED DIRECTION 182.15

TIE-IN DATA						
MEASURED	VERTICAL			N-S	E-W	DATA
DEPTH	DEPTH	INCLIN	AZIMUTH	COORD	COORD	SOURCE
0 ft	.00 ft	.0 ft	.0 ft	.00 ft	.00 ft	Surface

FIRST	FIRST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
14-Nov-15	185 ft	0.30	262.00

SURVEY INSTRUMENT
TYPE
Phoenix MWD

LAST	LAST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
8-Jan-16	16,485 ft	90.2	180

TO THE BEST OF MY KNOWLEDGE I
CERTIFY THIS SURVEY DATA TO BE
TRUE AND CORRECT.

PROJECTED	PROJECTED		
TD SURVEY	TD SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
8-Jan-16	16,535 ft	90.2	180

Robert Brewer

PRINT YOUR NAME ABOVE

Robert Brewer

SIGN YOUR NAME ABOVE

1/8/2016

TODAY'S DATE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	6.63
DECLINATION OR GRID	GRID

MWD SUPERVISOR 1

Robert Brewer

DIRECTIONAL DRILLER 1

Casey Tubbe

MWD SUPERVISOR 2

Lance Mosby

DIRECTIONAL DRILLER 2

Justin Jackson

12329 Cutten Road

Houston, Texas 77066

(713)337-0609 (Voice), (713)337-0599 (Fax)



Chevron

**Lea County, NM (NAD27 NME)
Salado Draw 29 26 33 Fed Com
2H - Slot 2H**

OH / Job 1514334

Survey: Phoenix MWD Surveys

Standard Survey Report

08 January, 2016





Phoenix Technology Services Survey Report



Company: Chevron
Project: Lea County, NM (NAD27 NME)
Site: Salado Draw 29 26 33 Fed Com
Well: 2H
Wellbore: OH / Job 1514334
Design: Surveys (Pace X30)

Local Co-ordinate Reference: Well 2H - Slot 2H
TVD Reference: RKB @ 3242.00usft (Pace X30)
MD Reference: RKB @ 3242.00usft (Pace X30)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Compass 5000 GCR

Project	Lea County, NM (NAD27 NME)		
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	Salado Draw 29 26 33 Fed Com				
Site Position:		Northing:	372,173.00 usft	Latitude:	32° 1' 15.91374 N
From:	Map	Easting:	727,838.00 usft	Longitude:	103° 35' 53.52012 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.39 "

Well	2H - Slot 2H					
Well Position	+N-S	0.00 usft	Northing:	372,173.00 usft	Latitude:	32° 1' 15.91205 N
	+E-W	0.00 usft	Easting:	727,863.00 usft	Longitude:	103° 35' 53.22975 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3.215.00 usft

Wellbore	OH / Job 1514334				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	10/7/2015	7.02	59.75	48,070

Design	Surveys (Pace X30)				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)	
	0.00	0.00	0.00	182.15	

Survey Program	Date 1/8/2016			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
185.00	16,535.00	Phoenix MWD Surveys (OH / Job 1514334)	PHX+MWD+HDGM	PHX+OWSG MWD + HDGM

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)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
185.00	0.30	262.00	185.00	-0.07	-0.48	0.09	0.16	0.16	0.00	
First Phoenix Survey										
375.00	0.30	250.60	375.00	-0.30	-1.44	0.36	0.03	0.00	-6.00	
559.00	0.50	241.90	558.99	-0.84	-2.60	0.94	0.11	0.11	-4.73	
728.00	0.50	244.80	727.99	-1.50	-3.92	1.65	0.02	0.00	1.78	
796.00	0.50	238.70	795.98	-1.78	-4.44	1.95	0.08	0.00	-9.12	
962.00	0.40	254.60	961.98	-2.31	-5.62	2.52	0.10	-0.06	9.58	
1,147.00	0.40	255.50	1,146.97	-2.84	-6.87	2.90	0.00	0.00	0.49	
1,328.00	0.40	278.90	1,327.97	-2.70	-8.11	3.01	0.09	0.00	12.93	
1,508.00	0.80	358.40	1,505.96	-1.37	-8.75	1.69	0.48	0.22	44.66	



Phoenix Technology Services

Survey Report



Company: Chevron
 Project: Lea County, NM (NAD27 NME)
 Site: Salado Draw 29 26 33 Fed Com
 Well: 2H
 Wellbore: OH / Job 1514334
 Design: Surveys (Pace X30)

Local Co-ordinate Reference: Well 2H - Slot 2H
 TVD Reference: RKB @ 3242.00usft (Pace X30)
 MD Reference: RKB @ 3242.00usft (Pace X30)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: Compass 5000 GCR

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)
1,683.00	3.70	359.50	1,682.81	5.58	-8.84	-5.25	1.84	1.84	0.62
1,860.00	1.60	20.80	1,859.81	13.60	-8.01	-13.29	1.29	-1.19	12.03
2,038.00	2.50	7.80	2,037.50	19.77	-6.80	-19.51	0.57	0.51	-7.30
2,215.00	2.40	5.80	2,214.33	27.28	-5.70	-27.05	0.07	-0.06	-1.13
2,392.00	2.50	358.10	2,391.17	34.83	-5.46	-34.80	0.19	0.06	-4.35
2,569.00	2.70	1.30	2,567.99	42.86	-5.49	-42.82	0.14	0.11	1.81
2,746.00	2.80	0.90	2,744.79	51.35	-5.33	-51.11	0.06	0.06	-0.23
2,923.00	3.00	3.40	2,921.56	60.29	-4.98	-60.06	0.13	0.11	1.41
3,101.00	2.30	348.00	3,099.37	88.44	-5.45	-88.18	0.56	-0.39	-8.65
3,278.00	2.40	340.70	3,276.22	75.41	-7.41	-75.08	0.18	0.06	-4.12
3,455.00	2.20	350.10	3,453.08	82.25	-9.22	-81.85	0.24	-0.11	5.31
3,632.00	2.40	9.30	3,629.94	89.26	-9.21	-88.85	0.45	0.11	10.85
3,810.00	2.60	3.20	3,807.77	96.97	-8.38	-96.58	0.19	0.11	-3.43
3,987.00	3.70	316.10	3,984.53	105.09	-12.12	-104.56	1.53	0.62	-26.61
4,164.00	2.70	277.30	4,161.27	109.74	-20.21	-108.90	1.31	-0.56	-21.92
4,341.00	2.30	264.10	4,338.10	109.90	-27.88	-108.78	0.39	-0.23	-7.46
4,519.00	2.20	257.00	4,515.97	108.77	-34.76	-107.38	0.17	-0.06	-3.99
4,696.00	2.30	253.90	4,692.83	107.02	-41.49	-105.38	0.09	0.06	-1.75
4,752.00	2.20	253.50	4,748.79	106.40	-43.60	-104.69	0.18	-0.18	-0.71
4,883.00	2.10	256.70	4,879.69	105.13	-48.34	-103.24	0.12	-0.06	2.44
5,060.00	2.90	264.00	5,056.52	103.92	-55.95	-101.75	0.49	0.45	4.12
5,237.00	4.60	267.70	5,233.14	103.17	-67.50	-100.56	0.97	0.96	2.09
5,414.00	4.40	263.90	5,409.59	102.16	-81.34	-99.03	0.20	-0.11	-2.15
5,592.00	4.00	250.60	5,587.12	99.37	-93.99	-95.77	0.59	-0.22	-7.47
5,769.00	3.50	249.80	5,763.74	95.46	-104.88	-91.45	0.28	-0.28	-0.45
5,946.00	4.10	258.10	5,940.35	92.29	-116.14	-87.86	0.46	0.34	4.69
6,123.00	4.40	262.80	6,116.87	90.13	-129.07	-85.22	0.26	0.17	2.68
6,301.00	4.20	262.70	6,294.36	88.45	-142.31	-83.04	0.11	-0.11	-0.06
6,478.00	4.10	260.00	6,470.90	86.52	-154.97	-80.65	0.12	-0.06	-1.53
6,655.00	3.90	259.00	6,647.47	84.26	-167.11	-77.94	0.12	-0.11	-0.56
6,832.00	3.50	257.60	6,824.10	81.97	-178.30	-75.22	0.23	-0.23	-0.79
7,009.00	3.90	263.30	7,000.73	80.10	-189.55	-72.93	0.31	0.23	3.22
7,186.00	4.40	259.80	7,177.27	78.20	-202.21	-70.56	0.32	0.28	-1.98
7,363.00	4.10	274.50	7,353.78	77.49	-215.20	-69.36	0.64	-0.17	8.31
7,541.00	4.20	269.90	7,531.32	77.98	-228.06	-69.37	0.20	0.06	-2.58
7,718.00	4.00	264.80	7,707.87	77.41	-240.69	-68.32	0.23	-0.11	-2.66
7,895.00	4.10	277.70	7,884.43	77.70	-253.11	-68.15	0.52	0.06	7.29
8,073.00	3.70	276.80	8,062.02	79.23	-265.12	-69.23	0.23	-0.22	-0.51
8,250.00	4.20	270.40	8,238.60	79.95	-277.27	-69.49	0.38	0.28	-3.62
8,427.00	3.90	265.10	8,415.15	79.48	-289.75	-68.55	0.27	-0.17	-2.99
8,605.00	3.30	261.70	8,592.80	78.23	-300.85	-66.88	0.36	-0.34	-1.91
8,640.00	3.10	261.90	8,627.75	77.95	-302.79	-66.53	0.57	-0.57	0.57
8,670.00	3.00	259.20	8,657.70	77.69	-304.36	-66.21	0.58	-0.33	-9.00



Phoenix Technology Services Survey Report



Company: Chevron
Project: Lea County, NM (NAD27 NME)
Site: Salado Draw 29 28 33 Fed Com
Well: 2H
Wellbore: OH / Job 1514334
Design: Surveys (Pace X30)

Local Co-ordinate Reference: Well 2H - Slot 2H
TVD Reference: RKB @ 3242.00usft (Pace X30)
MD Reference: RKB @ 3242.00usft (Pace X30)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Compass 5000 GCR

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)
8,715.00	4.80	259.50	8,702.80	77.14	-307.29	-85.55	3.56	3.56	0.67
8,759.00	8.80	234.80	8,746.30	74.84	-311.81	-83.09	11.60	9.77	-56.59
8,804.00	17.00	224.10	8,790.12	68.09	-319.23	-56.06	18.67	18.00	-23.33
8,848.00	23.20	216.20	8,831.43	56.46	-328.84	-44.08	15.35	14.09	-17.95
8,892.00	27.80	202.40	8,871.15	39.93	-337.89	-27.22	17.17	10.68	-31.36
8,937.00	31.60	191.40	8,910.24	18.81	-344.24	-5.68	14.62	8.22	-24.44
8,982.00	33.80	181.70	8,948.16	-5.41	-346.95	18.42	12.42	4.44	-21.56
9,026.00	37.80	176.40	8,983.96	-30.99	-346.46	43.97	11.47	9.09	-12.05
9,071.00	43.00	175.20	9,016.26	-60.00	-344.32	72.88	12.12	12.00	-2.67
9,115.00	49.30	175.20	9,048.73	-91.81	-341.68	104.37	14.32	14.32	0.00
9,159.00	56.40	177.10	9,075.29	-126.58	-339.34	139.22	16.50	16.14	4.32
9,204.00	62.40	179.20	9,098.18	-165.27	-336.11	177.84	13.92	13.33	4.67
9,248.00	66.50	180.30	9,117.16	-204.96	-337.94	217.50	9.59	9.32	2.50
9,301.00	73.40	180.30	9,135.32	-254.71	-338.20	267.23	13.02	13.02	0.00
9,333.00	76.20	180.10	9,143.71	-285.59	-338.31	298.09	8.77	8.75	-0.63
9,364.00	80.40	180.60	9,149.99	-315.94	-338.50	328.42	13.64	13.55	1.61
9,396.00	82.80	181.50	9,154.64	-347.59	-339.08	360.07	8.29	7.81	2.81
9,427.00	85.50	182.10	9,157.77	-378.41	-340.05	390.91	8.61	8.39	1.84
9,522.00	88.30	182.10	9,162.91	-473.20	-343.52	485.76	2.95	2.95	0.00
9,616.00	88.90	182.20	9,165.20	-567.11	-347.05	579.73	0.65	0.64	0.11
9,711.00	89.00	180.80	9,166.95	-662.06	-349.53	674.71	1.48	0.11	-1.47
9,805.00	88.00	179.90	9,169.41	-756.02	-350.11	768.63	1.43	-1.06	-0.96
9,899.00	87.30	180.30	9,173.26	-849.94	-350.27	862.49	0.88	-0.74	0.43
9,994.00	89.20	181.30	9,176.16	-944.88	-351.60	957.41	2.26	2.00	1.05
10,088.00	90.50	180.00	9,176.41	-1,038.87	-352.66	1,051.38	1.96	1.38	-1.38
10,183.00	92.00	179.50	9,174.34	-1,133.84	-352.25	1,146.27	1.66	1.58	-0.53
10,277.00	92.20	178.70	9,170.89	-1,227.77	-350.77	1,240.07	0.88	0.21	-0.85
10,372.00	93.10	178.40	9,166.50	-1,322.64	-348.37	1,334.78	1.00	0.95	-0.32
10,466.00	90.00	178.20	9,163.96	-1,416.55	-345.59	1,428.52	3.30	-3.30	-0.21
10,561.00	90.30	177.90	9,163.71	-1,511.49	-342.35	1,523.28	0.45	0.32	-0.32
10,655.00	90.30	177.60	9,163.22	-1,605.42	-338.66	1,617.00	0.32	0.00	-0.32
10,750.00	90.40	178.50	9,162.63	-1,700.36	-335.43	1,711.75	0.95	0.11	0.95
10,845.00	91.30	178.60	9,161.23	-1,795.32	-333.03	1,806.55	0.95	0.95	0.11
10,939.00	91.09	179.74	9,159.27	-1,889.29	-331.67	1,900.40	1.23	-0.22	1.21
11,034.00	91.51	180.43	9,157.11	-1,984.26	-331.81	1,995.32	0.85	0.44	0.73
11,128.00	87.76	178.74	9,157.71	-2,078.24	-331.13	2,089.20	4.38	-3.99	-1.80
11,223.00	86.28	177.55	9,162.65	-2,173.06	-328.06	2,183.84	2.00	-1.56	-1.25
11,318.00	87.79	178.29	9,167.56	-2,267.86	-324.61	2,278.45	1.77	1.59	0.78
11,412.00	87.82	177.18	9,171.16	-2,361.72	-320.90	2,372.10	1.18	0.03	-1.18
11,507.00	89.05	177.81	9,173.76	-2,456.59	-316.75	2,466.75	1.45	1.29	0.66
11,601.00	89.75	178.15	9,174.74	-2,550.53	-313.44	2,560.49	0.83	0.74	0.36
11,696.00	93.64	181.50	9,171.93	-2,645.45	-313.14	2,655.34	5.40	4.09	3.53
11,790.00	89.05	180.66	9,169.72	-2,739.36	-314.91	2,749.27	4.96	-4.88	-0.89



Phoenix Technology Services Survey Report



Company: Chevron
Project: Lea County, NM (NAD27 NME)
Site: Salado Draw 29 28 33 Fed Corn
Well: 2H
Wellbore: OH / Job 1514334
Design: Surveys (Pace X30)

Local Co-ordinate Reference: Well 2H - Slot 2H
TVD Reference: RKB @ 3242.00usft (Pace X30)
MD Reference: RKB @ 3242.00usft (Pace X30)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Compass 5000 GCR

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)
11,885.00	86.84	178.70	9,173.30	-2,834.30	-314.39	2,844.11	3.27	-2.54	-2.06
11,979.00	87.08	179.55	9,178.44	-2,928.15	-312.95	2,937.83	1.02	0.48	0.90
12,074.00	84.31	177.02	9,185.56	-3,022.82	-310.12	3,032.33	3.95	-2.93	-2.66
12,168.00	87.46	179.02	9,192.31	-3,116.51	-306.89	3,125.83	3.97	3.35	2.13
12,263.00	85.30	177.55	9,198.30	-3,211.27	-304.05	3,220.42	2.75	-2.27	-1.55
12,357.00	87.03	178.60	9,204.59	-3,305.00	-300.90	3,313.97	2.15	1.84	1.12
12,452.00	90.70	182.96	9,206.47	-3,399.93	-302.20	3,408.88	6.00	3.86	4.59
12,546.00	89.75	179.36	9,206.10	-3,493.90	-304.10	3,502.85	3.96	-1.01	-3.83
12,640.00	91.30	179.10	9,205.24	-3,587.88	-302.84	3,596.72	1.67	1.65	-0.28
12,735.00	92.60	180.60	9,202.01	-3,682.82	-302.59	3,691.58	2.09	1.37	1.58
12,829.00	91.00	181.40	9,199.06	-3,776.78	-304.23	3,785.51	1.90	-1.70	0.85
12,924.00	89.70	180.40	9,198.48	-3,871.74	-305.72	3,880.49	1.73	-1.37	-1.05
13,018.00	89.80	180.10	9,198.89	-3,965.74	-306.13	3,974.43	0.34	0.11	-0.32
13,112.00	89.40	178.50	9,199.54	-4,059.73	-304.98	4,068.31	1.75	-0.43	-1.70
13,207.00	88.30	178.60	9,201.45	-4,154.68	-302.58	4,163.10	1.16	-1.16	0.11
13,301.00	90.40	179.10	9,202.52	-4,248.64	-300.89	4,258.94	2.30	2.23	0.53
13,396.00	93.30	181.50	9,199.45	-4,343.58	-301.19	4,351.82	3.96	3.05	2.53
13,491.00	92.00	179.40	9,195.06	-4,438.46	-301.93	4,446.67	2.60	-1.37	-2.21
13,585.00	88.60	178.30	9,194.57	-4,532.43	-300.04	4,540.50	3.80	-3.62	-1.17
13,680.00	89.70	179.30	9,195.97	-4,627.40	-298.05	4,635.32	1.56	1.16	1.05
13,774.00	90.00	179.30	9,196.22	-4,721.39	-296.91	4,729.20	0.32	0.32	0.00
13,868.00	88.10	178.20	9,197.78	-4,815.35	-294.86	4,823.02	2.34	-2.02	-1.17
13,963.00	94.80	180.10	9,195.29	-4,910.24	-293.45	4,917.80	7.43	7.16	2.00
14,058.00	94.80	181.50	9,187.26	-5,004.89	-294.77	5,012.43	1.47	-0.11	1.47
14,152.00	88.50	181.00	9,184.56	-5,098.78	-296.82	5,106.33	6.72	-6.70	-0.53
14,247.00	87.80	180.60	9,187.62	-5,193.72	-298.14	5,201.25	0.85	-0.74	-0.42
14,341.00	87.40	179.90	9,191.56	-5,287.64	-298.55	5,295.12	0.86	-0.43	-0.74
14,436.00	89.40	180.50	9,194.21	-5,382.60	-298.88	5,390.02	2.20	2.11	0.63
14,531.00	90.60	179.90	9,194.21	-5,477.59	-299.21	5,484.96	1.41	1.26	-0.63
14,625.00	90.70	180.60	9,193.14	-5,571.59	-299.62	5,578.91	0.75	0.11	0.74
14,720.00	87.10	179.40	9,194.97	-5,666.55	-299.63	5,673.80	3.99	-3.79	-1.26
14,815.00	88.70	181.70	9,198.45	-5,761.47	-300.54	5,768.69	2.95	1.68	2.42
14,908.00	89.00	181.10	9,200.34	-5,855.43	-302.83	5,862.67	0.71	0.32	-0.64
15,004.00	89.90	181.80	9,201.25	-5,950.39	-305.24	5,957.65	1.20	0.95	0.74
15,098.00	90.00	181.30	9,201.33	-6,044.36	-307.78	6,051.65	0.54	0.11	-0.53
15,193.00	88.20	181.30	9,202.82	-6,139.32	-309.93	6,146.62	1.89	-1.89	0.00
15,288.00	90.30	180.30	9,204.07	-6,234.29	-311.26	6,241.58	2.45	2.21	-1.05
15,382.00	90.20	177.90	9,203.66	-6,328.27	-309.78	6,335.44	2.58	-0.11	-2.55
15,476.00	90.80	178.50	9,202.84	-6,422.15	-305.19	6,429.08	1.62	0.64	-1.49
15,571.00	91.20	174.90	9,201.18	-6,516.87	-298.07	6,523.46	1.74	0.42	-1.68
15,665.00	90.00	175.60	9,200.19	-6,610.54	-290.29	6,616.78	1.48	-1.28	0.74
15,760.00	92.20	179.00	9,198.37	-6,705.40	-285.81	6,711.40	4.28	2.32	3.58
15,854.00	90.40	179.20	9,196.24	-6,799.38	-284.34	6,805.24	1.93	-1.81	0.21
15,949.00	88.40	181.30	9,197.23	-6,894.34	-284.75	6,900.17	3.05	-2.11	2.21



Phoenix Technology Services Survey Report



Company: Chevron
Project: Lea County, NM (NAD27 NME)
Site: Salado Draw 29 26 33 Fed Com
Well: 2H
Wellbore: OH / Job 1514334
Design: Surveys (Pace X30)

Local Co-ordinate Reference: Well 2H - Slot 2H
TVD Reference: RKB @ 3242.00usft (Pace X30)
MD Reference: RKB @ 3242.00usft (Pace X30)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Compass 5000 GCR

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)
16,043.00	89.30	181.40	9,199.12	-8,988.29	-286.97	6,994.14	0.96	0.96	0.11
16,138.00	89.60	182.00	9,200.03	-7,083.25	-289.78	7,089.13	0.71	0.32	0.63
16,232.00	90.90	180.60	9,199.62	-7,177.22	-291.92	7,183.12	2.03	1.38	-1.49
16,327.00	88.60	179.80	9,200.03	-7,272.21	-292.25	7,278.05	2.56	-2.42	-0.84
16,421.00	89.30	179.30	9,201.76	-7,366.19	-291.51	7,371.94	0.92	0.74	-0.53
16,485.00	90.20	180.00	9,202.04	-7,430.19	-291.12	7,435.88	1.78	1.41	1.09
Final Phoenix Survey									
16,535.00	90.20	180.00	9,201.86	-7,480.19	-291.12	7,485.84	0.00	0.00	0.00
Projection to TD									

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
185.00	185.00	-0.07	-0.48	First Phoenix Survey
16,485.00	9,202.04	-7,430.19	-291.12	Final Phoenix Survey
16,535.00	9,201.86	-7,480.19	-291.12	Projection to TD

Checked By: _____ Approved By: _____ Date: _____