Form 3160-5
(August 2007)

HOBBS OCD
DEC 02 2016
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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NMOCD
Hobbs

FORM 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.

5. Lease Serial No.
NMNM118723

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
SD WE 14 FED P 5 2H

2. Name of Operator
CHEVRON USA INCORPORATED
Contact: DENISE PINKERTON
E-Mail: leakejd@chevron.com

9. API Well No.
30-025-42801-00-X1

3a. Address
15 SMITH ROAD
MIDLAND, TX 79705

3b. Phone No. (include area code)
Ph: 432-687-7375

10. Field and Pool, or Exploratory
JENNINGS

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 14 T26S R32E SWSW 10FSL 673FWL

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 Drilling Operations
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ 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 recomplete 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 recompletion 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.)

06/15/2016: SPUD WELL. DRILL SURFACE HOLE FR 112-673.
RUN 13 3/8", 54.5#,J-55,STC SURFACE CSG & SET @ 662'. FC @ 622'.TEST LINES TO 500/3000PSI. PMP 40 BBLS 8.4PPG FW SPACER. CMT W/845 SX CL C CMT @ 14.8PPG. BUMP PLUG W/528PSI OVER FINAL CIRC PRESS @ 828PSI. FULL RETURNS THROUGHOUT JOB. FINAL CIRC PRESS PRIOR TO BUMPING PLUG 300PSI @ 2.5BPM. 464 SX CMT TO SURF. CMT IN PLACE @ 21:13 HRS.

06/30/2016: TEST BOPE TO 250L/5000H. TEST SURF CSG TO 1500PSI FOR 30 MINS. DRILL 10' NEW FORMATION. DRILL 683-1206, 1181, 1803, 2335, 2779, 3133, 3400, 3420, 3933, 4100, 4200, 4230, 4540.

07/03/2016: RUN 9 5/8",40#,HCK-55,LTC INTERMEDIATE CSG & SET @ 4530'. FC @ 4444. TEST LINES TO 500/3500PSI. PMP 35 BBLS 8.4PPG FW SPACER. CMT W/1034 SX LEAD,@ 11.9PPG, & 463 SX TAIL @ 14.8PPG. BUMP PLUG W/421 PSI OVER FINAL CIRC PRESS @ 1039PSI. FULL RETURNS THROUGHOUT JOB. FINAL CIRC PRESS

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #353737 verified by the BLM Well Information System
For CHEVRON USA INCORPORATED, sent to the Hobbs
Committed to AFMSS for processing by PRISCILLA PEREZ on 10/06/2016 (17PP0019SE)

Name *(Printed/Typed)* DENISE PINKERTON — Title REGULATORY SPECIALIST

Signature (Electronic Submission) — Date 10/06/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

ACCEPTED FOR RECORD
NOV 4 2016
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

Approved By _____ Title _____ Date _____

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 #353737 that would not fit on the form

32. Additional remarks, continued

PRIOR TO BUMPING PLUG 1039PSI @ 2.3BPM. 361 SX CMT TO SURF. CMT IN PLACE @ 22:25. WOC.TAG CMT @ 4435'. PRESS TEST INTERMEDIATE CSG TO 2765PSI FOR 30 MINS. DRILL 10' NEW FORMATION TO 4550'.

07/04/2016: DRILL 4550-4745, 5469, 5913, 6589, 6962, 7406, 8293, 8531, 8565, 8598, 8734, 8955, 9338, 9533, 9545, 9560, 10161, 10487, 10692, 11095, 11165, 12198, 12474, 12631, 12658, 13129, 13400, 13795, 13917'. ***TD REACHED ON 07/15/2016)

07/16/2016: RAN 5 1/2",20#,HCP-110 TXP BTC PRODUCTION CSG & SET @ 13908'. LC @ 13819. RSI TOOL @ 13750. MRKR JT @ 8507. TEST 500L/7000H. CMT W/626 SX CL H LEAD, 962 SX CL H LEAD, & 120 SX CL H TAIL. PMP 306 BBLS DISPL, 20 BBLS ACID. FINAL CIRC PRESS 1545PSI @ 4.2BPM. BUMP PLUG 640PSI OVER FCP @ 2187PSI. RETURNS SEEN DURING JOB. CMT IN PLACE @ 4:00 HRS. TEST TO 5000PSI FOR 15 MINS. GOOD.

07/17/2016: RELEASE RIG.

Casing Summary

Well Name	Lease	Field Name	Business Unit
SALADO DRAW WE 14 FED P5 002H		JENNINGS	Mid-Continent

Ground Elevation (ft)	Original RKB (ft)	Current RKB Elevation	Mud Line Elevation (ft)	Water Depth (ft)
3,157.00	3,189.60	3,189.60, 6/3/2016		

Surface, Planned?-N, 662ftKB

Set Depth (MD) (ftKB)	Set Tension (kips)	String Nominal OD (in)	String Min Drift (in)	Centralizers	Scratchers
662		13 3/8	12.469	8	

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	Wellhead	13 3/8	12.615	54.50	J-55	ST&C	33	36	2.85	2,730.0	1,130.0
1	Pup Joint	13 3/8	12.615	54.50	J-55	ST&C	36	40	4.25	2,730.0	1,130.0
14	Casing Joint	13 3/8	12.615	54.50	J-55	ST&C	40	621	580.79	2,730.0	1,130.0
1	Float Collar	13 3/8	12.615	54.50	J-55	ST&C	621	622	1.33	2,730.0	1,130.0
1	Casing Joint	13 3/8	12.615	54.50	J-55	ST&C	622	660	38.10	2,730.0	1,130.0
1	Float Shoe	13 3/8	12.615	54.50	J-55	ST&C	660	662	1.78	2,730.0	1,130.0

Intermediate Casing 1, Planned?-N, 4,530ftKB

Set Depth (MD) (ftKB)	Set Tension (kips)	String Nominal OD (in)	String Min Drift (in)	Centralizers	Scratchers
4,530		9 5/8	8.688	32	

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 Hanger	9 5/8	8.835	40.00	HCK-55		36	37	0.98	3,950.0	4,230.0
1	Casing Pup Joint	9 5/8	8.835	40.00	HCK-55		37	41	4.17	3,950.0	4,230.0
108	Casing Joint	9 5/8	8.835	40.00	HCK-55		41	4,444	4,403.18	3,950.0	4,230.0
1	Float Collar	9 5/8	8.835	40.00	HCK-55		4,444	4,446	1.48	3,950.0	4,230.0
2	Casing Joint	9 5/8	8.835	40.00	HCK-55		4,446	4,528	82.82	3,950.0	4,230.0
1	Float Shoe	9 5/8	8.835	40.00	HCK-55		4,528	4,530	1.63	3,950.0	4,230.0

Production Casing, Planned?-N, 13,908ftKB

Set Depth (MD) (ftKB)	Set Tension (kips)	String Nominal OD (in)	String Min Drift (in)	Centralizers	Scratchers
13,908		5 1/2		102	

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	Landing Joint	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	36	36	0.00		
1	Hanger	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	36	38	2.05		
1	Hanger Pup	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	38	42	3.90		
205	Casing Joint	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	42	8,507	8,465.00		
1	Pup Joint	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	8,507	8,512	5.15		
125	Casing Joint	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	8,512	13,741	5,229.04		
1	RSI Pup	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,741	13,750	9.02		
1	RSI	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,750	13,757	6.70		
1	RSI Pup	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,757	13,766	9.54		
1	Casing Joint	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,766	13,809	42.67		
1	LC Pup	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,809	13,819	9.91		
1	Landing Collar	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,819	13,820	1.50		
1	Casing Joint	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,820	13,863	43.24		
1	Float Collar	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,863	13,866	2.44		
1	Casing Joint	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,866	13,906	40.63		
1	Float Shoe	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,906	13,908	1.57		

Report Printed: 10/5/2016

Cement Summary

Surface Casing Cement

Well Name	Lease	Field Name	Business Unit
SALADO DRAW WE 14 FED P5 002H		JENNINGS	Mid-Continent

Ground Elevation (ft)	Original RKB (ft)	Current RKB Elevation	Mud Line Elevation (ft)	Water Depth (ft)
3,157.00	3,189.60	3,189.60, 6/3/2016		

Original Hole

Wellbore Name	Directional Type	Min Kick Off Depth (ftKB)	Vertical Section Direction (°)
Original Hole	Horizontal		359.80

Hole Size (in)	Act Top (ftKB)	Act Btm (ftKB)
17 1/2	32.6	673.0
12 1/4	673.0	4,540.0
8 3/4	4,540.0	13,917.0

Multi-bowl, FMC on 6/15/2016 16:00

Sub-Type	Install Date
Multi-bowl	6/15/2016

Des	Make	Model	WP (psi)	Service	SN

Surface, Planned?-N, 662ftKB

Casing Description	Wellbore	Run Date	Set Depth (MD) (ftKB)	Stick Up (ftKB)	Set Tension (kips)
Surface	Original Hole	6/15/2016	662	-32.9	

Centralizers	Scratchers
8	

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	Wellhead	13 3/8	12.615	54.50	J-55		ST&C	2.85	33	36
1	Pup Joint	13 3/8	12.615	54.50	J-55		ST&C	4.25	36	40
14	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	580.79	40	621
1	Float Collar	13 3/8	12.615	54.50	J-55		ST&C	1.33	621	622
1	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	38.10	622	660
1	Float Shoe	13 3/8	12.615	54.50	J-55		ST&C	1.78	660	662

Intermediate Casing 1, Planned?-N, 4,530ftKB

Casing Description	Wellbore	Run Date	Set Depth (MD) (ftKB)	Stick Up (ftKB)	Set Tension (kips)
Intermediate Casing 1	Original Hole	7/3/2016	4,530	-35.7	

Centralizers	Scratchers
32	

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 Hanger	9 5/8	8.835	40.00	HCK-55			0.98	36	37
1	Casing Pup Joint	9 5/8	8.835	40.00	HCK-55			4.17	37	41
108	Casing Joint	9 5/8	8.835	40.00	HCK-55			4,403.18	41	4,444
1	Float Collar	9 5/8	8.835	40.00	HCK-55			1.48	4,444	4,446
2	Casing Joint	9 5/8	8.835	40.00	HCK-55			82.82	4,446	4,528
1	Float Shoe	9 5/8	8.835	40.00	HCK-55			1.63	4,528	4,530

Production Casing, Planned?-N, 13,908ftKB

Casing Description	Wellbore	Run Date	Set Depth (MD) (ftKB)	Stick Up (ftKB)	Set Tension (kips)
Production Casing	Original Hole	7/16/2016	13,908	-35.6	

Centralizers	Scratchers
102	

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	Landing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	0.00	36	36
1	Hanger	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.05	36	38
1	Hanger Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	3.90	38	42
205	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	8,465.00	42	8,507
1	Pup Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	5.15	8,507	8,512
125	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	5,229.04	8,512	13,741
1	RSI Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.02	13,741	13,750
1	RSI	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	6.70	13,750	13,757
1	RSI Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.54	13,757	13,766
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	42.67	13,766	13,809

Report Printed: 10/5/2016

Cement Summary

Surface Casing Cement

Well Name	Lease	Field Name	Business Unit
SALADO DRAW WE 14 FED P5 002H		JENNINGS	Mid-Continent

Ground Elevation (ft)	Original RKB (ft)	Current RKB Elevation	Mud Line Elevation (ft)	Water Depth (ft)
3,157.00	3,189.60	3,189.60, 6/3/2016		

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	LC Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.91	13,809	13,819
1	Landing Collar	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	1.50	13,819	13,820
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	43.24	13,820	13,863
1	Float Collar	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.44	13,863	13,866
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	40.63	13,866	13,906
1	Float Shoe	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	1.57	13,906	13,908

Surface Casing Cement, Casing, 6/15/2016 20:00

Cementing Start Date	Cementing End Date	Wellbore
6/15/2016	6/15/2016	Original Hole

Evaluation Method	Cement Evaluation Results
Returns to Surface	110 bbls cmt to surface

Comment

1, 32.6-673.0ftKB

Top Depth (ftKB)	Bottom Depth (ftKB)	Full Return?	Vol Cement Ret (bbl)	Top Plug?	Bottom Plug?
32.6	673.0	Y	110.0	Y	N

Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min)	Final Pump Pressure (psi)	Plug Bump Pressure (psi)
5.2	2.5	5.5	300.0	828.0

Pipe Reciprocated?	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)	Pipe Rotated?	Pipe RPM (rpm)
N			N	

Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)	Drill Out Diameter (in)	Drill Out Date

Spacer

Fluid Type	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
Spacer	FW w/ Dye			40.0

Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)

Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)
	8.33			

Cement Fluid Additives

Add	Type	Conc

Tail

Fluid Type	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
Tail		845	C	197.0

Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
32.6	680.0	125.0	1.33	6.37

Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)
	14.80			

Cement Fluid Additives

Add	Type	Conc

Displacement

Fluid Type	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
Displacement	Water Base Mud			94.0

Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)

Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)
	8.60			

Cement Fluid Additives

Add	Type	Conc

Report Printed: 10/5/2016

Cement Summary

Intermediate Casing Cement

Well Name	Lease	Field Name	Business Unit
SALADO DRAW WE 14 FED P5 002H		JENNINGS	Mid-Continent

Ground Elevation (ft)	Original RKB (ft)	Current RKB Elevation	Mud Line Elevation (ft)	Water Depth (ft)
3,157.00	3,189.60	3,189.60, 6/3/2016		

Original Hole

Wellbore Name	Directional Type	Min Kick Off Depth (ftKB)	Vertical Section Direction (°)
Original Hole	Horizontal		359.80

Hole Size (in)	Act Top (ftKB)	Act Btm (ftKB)
17 1/2	32.6	673.0
12 1/4	673.0	4,540.0
8 3/4	4,540.0	13,917.0

Multi-bowl, FMC on 6/15/2016 16:00

Sub Type	Install Date
Multi-bowl	6/15/2016

Des	Make	Model	WP (psi)	Service	SN

Surface, Planned?-N, 662ftKB

Casing Description	Wellbore	Run Date	Set Depth (MD) (ftKB)	Stick Up (ftKB)	Set Tension (kips)
Surface	Original Hole	6/15/2016	662	-32.9	

Centralizers	Scratchers
8	

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	Wellhead	13 3/8	12.615	54.50	J-55		ST&C	2.85	33	36
1	Pup Joint	13 3/8	12.615	54.50	J-55		ST&C	4.25	36	40
14	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	580.79	40	621
1	Float Collar	13 3/8	12.615	54.50	J-55		ST&C	1.33	621	622
1	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	38.10	622	660
1	Float Shoe	13 3/8	12.615	54.50	J-55		ST&C	1.78	660	662

Intermediate Casing 1, Planned?-N, 4,530ftKB

Casing Description	Wellbore	Run Date	Set Depth (MD) (ftKB)	Stick Up (ftKB)	Set Tension (kips)
Intermediate Casing 1	Original Hole	7/3/2016	4,530	-35.7	

Centralizers	Scratchers
32	

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 Hanger	9 5/8	8.835	40.00	HCK-55			0.98	36	37
1	Casing Pup Joint	9 5/8	8.835	40.00	HCK-55			4.17	37	41
108	Casing Joint	9 5/8	8.835	40.00	HCK-55			4,403.18	41	4,444
1	Float Collar	9 5/8	8.835	40.00	HCK-55			1.48	4,444	4,446
2	Casing Joint	9 5/8	8.835	40.00	HCK-55			82.82	4,446	4,528
1	Float Shoe	9 5/8	8.835	40.00	HCK-55			1.63	4,528	4,530

Production Casing, Planned?-N, 13,908ftKB

Casing Description	Wellbore	Run Date	Set Depth (MD) (ftKB)	Stick Up (ftKB)	Set Tension (kips)
Production Casing	Original Hole	7/16/2016	13,908	-35.6	

Centralizers	Scratchers
102	

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	Landing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	0.00	36	36
1	Hanger	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.05	36	38
1	Hanger Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	3.90	38	42
205	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	8,465.00	42	8,507
1	Pup Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	5.15	8,507	8,512
125	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	5,229.04	8,512	13,741
1	RSI Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.02	13,741	13,750
1	RSI	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	6.70	13,750	13,757
1	RSI Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.54	13,757	13,766
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	42.67	13,766	13,809

Report Printed: 10/5/2016

Cement Summary

Intermediate Casing Cement

Well Name	Lease	Field Name	Business Unit
SALADO DRAW WE 14 FED P5 002H		JENNINGS	Mid-Continent

Ground Elevation (ft)	Original RKB (ft)	Current RKB Elevation	Mud Line Elevation (ft)	Water Depth (ft)
3,157.00	3,189.60	3,189.60, 6/3/2016		

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	LC Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.91	13,809	13,819
1	Landing Collar	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	1.50	13,819	13,820
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	43.24	13,820	13,863
1	Float Collar	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.44	13,863	13,866
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	40.63	13,866	13,906
1	Float Shoe	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	1.57	13,906	13,908

Intermediate Casing Cement, Casing, 7/3/2016 19:00

Cementing Start Date	Cementing End Date	Wellbore
7/3/2016	7/3/2016	Original Hole

Evaluation Method	Cement Evaluation Results
Returns to Surface	150 bbls of cement to surface

Comment

1, 34.5-4,530.0ftKB

Top Depth (ftKB)	Bottom Depth (ftKB)	Full Return?	Vol Cement Ret (bbl)	Top Plug?	Bottom Plug?
34.5	4,530.0	N	150.0	Y	N

Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min)	Final Pump Pressure (psi)	Plug Bump Pressure (psi)
5.4	2.3	6.8	1,039.0	1,039.0

Pipe Reciprocated?	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)	Pipe Rotated?	Pipe RPM (rpm)
N			N	

Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)	Drill Out Diameter (in)	Drill Out Date

Spacer

Fluid Type	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
Spacer				35.0

Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)

Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)
	8.40			

Cement Fluid Additives

Add	Type	Conc

Lead

Fluid Type	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
Lead		1,034	C	443.0

Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
34.5	3,530.0	150.0	2.41	13.86

Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)
0.00	11.90			50.0

Cement Fluid Additives

Add	Type	Conc

Tail

Fluid Type	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
Tail		463	C	109.0

Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
3,530.0	4,530.0	85.0	1.33	6.35

Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)
0.00	14.80			50.0

Cement Fluid Additives

Add	Type	Conc

Displacement

Fluid Type	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
Displacement				

Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)

Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Summary

Intermediate Casing Cement

Well Name	Lease	Field Name	Business Unit
SALADO DRAW WE 14 FED P5 002H		JENNINGS	Mid-Continent

Ground Elevation (ft)	Original RKB (ft)	Current RKB Elevation	Mud Line Elevation (ft)	Water Depth (ft)
3,157.00	3,189.60	3,189.60, 6/3/2016		

Cement Fluid Additives

Add	Type	Conc

Report Printed: 10/5/2016

Cement Summary

Production Casing Cement

Well Name	Lease	Field Name	Business Unit
SALADO DRAW WE 14 FED P5 002H		JENNINGS	Mid-Continent

Ground Elevation (ft)	Original RKB (ft)	Current RKB Elevation	Mud Line Elevation (ft)	Water Depth (ft)
3,157.00	3,189.60	3,189.60, 6/3/2016		

Original Hole

Wellbore Name	Directional Type	Min Kick Off Depth (ftKB)	Vertical Section Direction (°)
Original Hole	Horizontal		359.80

Hole Size (in)	Act Top (ftKB)	Act Btm (ftKB)
17 1/2	32.6	673.0
12 1/4	673.0	4,540.0
8 3/4	4,540.0	13,917.0

Multi-bowl, FMC on 6/15/2016 16:00

Sub-Type	Install Date
Multi-bowl	6/15/2016

Des	Make	Model	WP (psi)	Service	SN

Surface, Planned?-N, 662ftKB

Casing Description	Wellbore	Run Date	Set Depth (MD) (ftKB)	Stick Up (ftKB)	Set Tension (kips)
Surface	Original Hole	6/15/2016	662	-32.9	

Centralizers	Scratchers
8	

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	Wellhead	13 3/8	12.615	54.50	J-55		ST&C	2.85	33	36
1	Pup Joint	13 3/8	12.615	54.50	J-55		ST&C	4.25	36	40
14	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	580.79	40	621
1	Float Collar	13 3/8	12.615	54.50	J-55		ST&C	1.33	621	622
1	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	38.10	622	660
1	Float Shoe	13 3/8	12.615	54.50	J-55		ST&C	1.78	660	662

Intermediate Casing 1, Planned?-N, 4,530ftKB

Casing Description	Wellbore	Run Date	Set Depth (MD) (ftKB)	Stick Up (ftKB)	Set Tension (kips)
Intermediate Casing 1	Original Hole	7/3/2016	4,530	-35.7	

Centralizers	Scratchers
32	

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 Hanger	9 5/8	8.835	40.00	HCK-55			0.98	36	37
1	Casing Pup Joint	9 5/8	8.835	40.00	HCK-55			4.17	37	41
108	Casing Joint	9 5/8	8.835	40.00	HCK-55			4,403.18	41	4,444
1	Float Collar	9 5/8	8.835	40.00	HCK-55			1.48	4,444	4,446
2	Casing Joint	9 5/8	8.835	40.00	HCK-55			82.82	4,446	4,528
1	Float Shoe	9 5/8	8.835	40.00	HCK-55			1.63	4,528	4,530

Production Casing, Planned?-N, 13,908ftKB

Casing Description	Wellbore	Run Date	Set Depth (MD) (ftKB)	Stick Up (ftKB)	Set Tension (kips)
Production Casing	Original Hole	7/16/2016	13,908	-35.6	

Centralizers	Scratchers
102	

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	Landing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	0.00	36	36
1	Hanger	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.05	36	38
1	Hanger Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	3.90	38	42
205	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	8,465.00	42	8,507
1	Pup Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	5.15	8,507	8,512
125	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	5,229.04	8,512	13,741
1	RSI Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.02	13,741	13,750
1	RSI	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	6.70	13,750	13,757
1	RSI Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.54	13,757	13,766
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	42.67	13,766	13,809

Report Printed: 10/5/2016

Cement Summary

Production Casing Cement

Well Name	Lease	Field Name	Business Unit
SALADO DRAW WE 14 FED P5 002H		JENNINGS	Mid-Continent

Ground Elevation (ft)	Original RKB (ft)	Current RKB Elevation	Mud Line Elevation (ft)	Water Depth (ft)
3,157.00	3,189.60	3,189.60, 6/3/2016		

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	LC Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.91	13,809	13,819
1	Landing Collar	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	1.50	13,819	13,820
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	43.24	13,820	13,863
1	Float Collar	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.44	13,863	13,866
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	40.63	13,866	13,906
1	Float Shoe	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	1.57	13,906	13,908

Production Casing Cement, Casing, 7/17/2016 00:30

Cementing Start Date	Cementing End Date	Wellbore
7/17/2016	7/17/2016	Original Hole

Evaluation Method	Cement Evaluation Results
Lift Pressure	FCP of 1,545 psi. Expected lift pressure of 1,551 psi.

Comment

1, 3,550.0-13,908.0ftKB

Top Depth (ftKB)	Bottom Depth (ftKB)	Full Return?	Vol Cement Ret (bbl)	Top Plug?	Bottom Plug?
3,550.0	13,908.0	Y	0.0	Y	Y

Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min)	Final Pump Pressure (psi)	Plug Bump Pressure (psi)
6.2	4.2	6.2	1,545.0	2,187.0

Pipe Reciprocated?	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)	Pipe Rotated?	Pipe RPM (rpm)
N			N	

Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)	Drill Out Diameter (in)	Drill Out Date

Spacer

Fluid Type	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
Spacer	30 bbls MPE @ 10.0 ppg			30.0

Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
2,603.0	3,680.0	0.0		

Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)
	10.00			

Cement Fluid Additives

Add	Type	Conc

Lead

Fluid Type	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
Lead	626 sks / 2.72 / cu ft. 1703 / 303 bbls @ 11.5 ppg / CemNet / D-177	626	H	303.0

Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
3,680.0	8,561.0	50.0	2.72	15.89

Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)
0.00	11.50			50.0

Cement Fluid Additives

Add	Type	Conc

Lead

Fluid Type	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
Lead	962 sks / 1.60 / cu ft. 1539 / 274 bbls @ 12.5 ppg	962	H	274.0

Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
8,561.0	12,937.0	35.0	1.60	8.63

Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)
0.00	12.50			50.0

Cement Fluid Additives

Add	Type	Conc

Report Printed: 10/5/2016

Cement Summary

Production Casing Cement

Well Name	Lease	Field Name	Business Unit
SALADO DRAW WE 14 FED P5 002H		JENNINGS	Mid-Continent

Ground Elevation (ft)	Original RKB (ft)	Current RKB Elevation	Mud Line Elevation (ft)	Water Depth (ft)
3,157.00	3,189.60	3,189.60, 6/3/2016		

Tail

Fluid Type	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
Tail	120 sks / 2.18 / cu ft. 262 / 46 bbls @ 15.0 ppg / D-177 .01% spike	120	H	46.0

Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
12,937.0	13,937.0	0.0	2.18	

Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)
0.00	15.00			50.0

Cement Fluid Additives

Add	Type	Conc

Displacement

Fluid Type	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl)
Displacement	FW			306.0

Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
		0.0		

Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)
	8.30			

Cement Fluid Additives

Add	Type	Conc

Report Printed: 10/5/2016

Phoenix Technology Services
SURVEY DATA CERTIFICATION

PHOENIX TECHNOLOGY SERVICES

PHOENIX JOB NUMBER	60134	OPERATOR	Chevron
WELL NAME	SD WE 14 Fed P5 2H	COUNTY & STATE	Lea County, New Mexico
API WELL NUMBER	30-025-42801	PROPOSED DIRECTION	3.36

TIE-IN DATA

MEASURED DEPTH	VERTICAL DEPTH	INCLIN	AZIMUTH	N-S COORD	E-W COORD	DATA SOURCE
658.00 ft	657.97 ft	0.6°	350.0°	5.61 N	2.12 W	Teledrift

FIRST SURVEY DATE	FIRST SURVEY DEPTH	INCLIN	AZIMUTH
1-Jul-16	856 ft	0.7°	339.8°

SURVEY INSTRUMENT TYPE
Phoenix MWD

LAST SURVEY DATE	LAST SURVEY DEPTH	INCLIN	AZIMUTH
5-Jul-16	8,474 ft	.7	195.2

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

PROJECTED TD SURVEY DATE	PROJECTED TD SURVEY DEPTH	INCLIN	AZIMUTH
5-Jul-16	8,531 ft	.7	195.2

Robert Brewer

PRINT YOUR NAME ABOVE

Robert Brewer

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	5.59
DECLINATION OR GRID	GRID

07/11/16

TODAY'S DATE

MWD SUPERVISOR 1	Robert Brewer	DIRECTIONAL DRILLER 1	Casey Tubbe
MWD SUPERVISOR 2	Lance Mosby	DIRECTIONAL DRILLER 2	Monte Gordon

12329 Cutten Rd., Houston, Texas 77066 (713)337-0600 (Voice), (713)337-0599 (Fax)

Chevron

Lea County, NM (NAD27 NME)
SD WE 14 Fed
P5 2H

OH / Job 60134

Survey: Phoenix MWD Surveys

Standard Survey Report

06 July, 2016

PHOENIX
TECHNOLOGY SERVICES

Company:	Chevron	**Local Co-ordinate Reference:**	Well P5 2H
Project:	Lea County, NM (NAD27 NME)	**TVD Reference:**	RKB @ 3190.00usft (Pace X30)
Site:	SD WE 14 Fed	**MD Reference:**	RKB @ 3190.00usft (Pace X30)
Well:	P5 2H	**North Reference:**	Grid
Wellbore:	OH / Job 60134	**Survey Calculation Method:**	Minimum Curvature
Design:	Surveys (Pace X30)	**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	SD WE 14 Fed				
Site Position:		**Northing:**	377,311.00 usft	**Latitude:**	32° 2' 7.83756 N
From:	Map	**Easting:**	711,217.00 usft	**Longitude:**	103° 39' 6.19467 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.36 °

Well	P5 2H					
Well Position	**+N/-S**	0.00 usft	**Northing:**	377,312.00 usft	**Latitude:**	32° 2' 7.84434 N
	+E/-W	0.00 usft	**Easting:**	711,267.00 usft	**Longitude:**	103° 39' 5.61376 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	0.00 usft	**Ground Level:**	3,157.00 usft

Wellbore OH / Job 60134

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	6/15/2016	6.95	59.75	48,027

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	3.36

Survey Program **Date** 7/6/2016

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
186.00	658.00	Teledrift MWD Surveys (OH / Job 60134)	MWD	MWD - Standard
856.00	8,531.00	Phoenix MWD Surveys (OH / Job 60134)	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)
658.00	0.60	350.00	657.97	5.61	-2.12	5.48	0.00	0.00	0.00
Tie In to Teledrift Surveys									
856.00	0.70	339.80	855.95	7.77	-2.72	7.59	0.08	0.05	-5.15
First Phoenix MWD Survey									
1,034.00	0.80	311.50	1,033.94	9.61	-4.02	9.36	0.21	0.06	-15.90
1,211.00	1.00	70.10	1,210.93	10.95	-3.50	10.73	0.88	0.11	67.01
1,389.00	3.80	97.80	1,388.76	10.68	3.81	10.89	1.66	1.57	15.56
1,567.00	7.70	80.90	1,565.84	11.77	21.44	13.01	2.37	2.19	-9.49
1,745.00	6.90	86.10	1,742.40	14.38	43.88	16.93	0.58	-0.45	2.92

Company:	Chevron	**Local Co-ordinate Reference:**	Well P5 2H
Project:	Lea County, NM (NAD27 NME)	**TVD Reference:**	RKB @ 3190.00usft (Pace X30)
Site:	SD WE 14 Fed	**MD Reference:**	RKB @ 3190.00usft (Pace X30)
Well:	P5 2H	**North Reference:**	Grid
Wellbore:	OH / Job 60134	**Survey Calculation Method:**	Minimum Curvature
Design:	Surveys (Pace X30)	**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)
1,923.00	6.60	83.00	1,919.16	16.36	64.70	20.12	0.27	-0.17	-1.74
2,100.00	6.70	81.60	2,094.97	19.10	85.01	24.06	0.11	0.06	-0.79
2,277.00	7.00	80.90	2,270.71	22.32	105.87	28.49	0.18	0.17	-0.40
2,454.00	7.30	81.20	2,446.33	25.74	127.64	33.18	0.17	0.17	0.17
2,632.00	7.40	80.20	2,622.87	29.43	150.11	38.18	0.09	0.06	-0.56
2,809.00	7.60	76.70	2,798.36	34.06	172.73	44.13	0.28	0.11	-1.98
2,986.00	7.60	76.40	2,973.80	39.50	195.50	50.90	0.02	0.00	-0.17
3,164.00	8.00	75.20	3,150.15	45.43	218.91	58.19	0.24	0.22	-0.67
3,342.00	7.80	80.90	3,326.47	50.51	242.82	64.66	0.45	-0.11	3.20
3,520.00	6.20	92.80	3,503.14	51.95	264.35	67.36	1.21	-0.90	6.69
3,698.00	6.30	90.70	3,680.09	51.36	283.71	67.91	0.14	0.06	-1.18
3,875.00	6.20	91.60	3,856.04	50.98	302.98	68.66	0.08	-0.06	0.51
4,053.00	4.00	98.50	4,033.32	49.79	318.73	68.40	1.28	-1.24	3.88
4,230.00	0.60	239.50	4,210.19	48.41	324.04	67.33	2.53	-1.92	79.66
4,408.00	0.70	256.10	4,388.18	47.67	322.18	66.48	0.12	0.06	9.33
4,482.00	0.80	248.60	4,462.17	47.37	321.26	66.13	0.19	0.14	-10.14
4,599.00	0.70	255.10	4,579.16	46.89	319.81	65.57	0.11	-0.09	5.56
4,777.00	1.00	255.10	4,757.14	46.21	317.26	64.74	0.17	0.17	0.00
4,954.00	0.70	246.40	4,934.12	45.38	314.77	63.77	0.18	-0.17	-4.92
5,131.00	1.00	224.00	5,111.10	43.84	312.71	62.10	0.25	0.17	-12.66
5,309.00	0.90	240.80	5,289.08	42.04	310.41	60.17	0.17	-0.06	9.44
5,486.00	0.40	317.30	5,466.07	41.82	308.78	59.85	0.51	-0.28	43.22
5,664.00	0.40	296.70	5,644.07	42.55	307.80	60.53	0.08	0.00	-11.57
5,841.00	0.70	299.00	5,821.06	43.35	306.30	61.24	0.17	0.17	1.30
6,019.00	1.00	55.50	5,999.05	44.76	306.63	62.67	0.82	0.17	65.45
6,196.00	1.10	35.70	6,176.02	47.02	308.90	65.05	0.21	0.06	-11.19
6,373.00	1.00	48.00	6,352.99	49.43	311.04	67.58	0.14	-0.06	6.95
6,551.00	0.90	34.90	6,530.96	51.62	312.99	69.88	0.13	-0.06	-7.36
6,728.00	0.70	54.70	6,707.95	53.38	314.67	71.74	0.19	-0.11	11.19
6,905.00	0.20	78.10	6,884.94	54.07	315.85	72.50	0.30	-0.28	13.22
7,082.00	0.20	217.40	7,061.94	53.89	315.97	72.32	0.21	0.00	78.70
7,260.00	0.30	265.70	7,239.94	53.60	315.31	72.00	0.13	0.06	27.13
7,438.00	0.60	211.60	7,417.94	52.78	314.36	71.12	0.27	0.17	-30.39
7,615.00	0.60	210.20	7,594.93	51.19	313.41	69.48	0.01	0.00	-0.79
7,792.00	1.00	211.40	7,771.91	49.07	312.14	67.29	0.23	0.23	0.68
7,969.00	0.20	34.70	7,948.90	48.00	311.51	66.19	0.68	-0.45	-99.83
8,147.00	0.30	115.00	8,126.90	48.06	312.11	66.28	0.19	0.06	45.11
8,325.00	0.70	164.90	8,304.89	46.81	312.81	65.08	0.31	0.22	28.03
8,474.00	0.70	195.20	8,453.88	45.06	312.81	63.32	0.25	0.00	20.34
Final Phoenix MWD Survey									
8,531.00	0.70	195.20	8,510.88	44.38	312.63	62.64	0.00	0.00	0.00
Projection to TD									

Company:	Chevron	**Local Co-ordinate Reference:**	Well P5 2H
Project:	Lea County, NM (NAD27 NME)	**TVD Reference:**	RKB @ 3190.00usft (Pace X30)
Site:	SD WE 14 Fed	**MD Reference:**	RKB @ 3190.00usft (Pace X30)
Well:	P5 2H	**North Reference:**	Grid
Wellbore:	OH / Job 60134	**Survey Calculation Method:**	Minimum Curvature
Design:	Surveys (Pace X30)	**Database:**	Compass 5000 GCR

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
658.00	657.97	5.61	-2.12	Tie In to Teledrift Surveys
856.00	855.95	7.77	-2.72	First Phoenix MWD Survey
8,474.00	8,453.88	45.06	312.81	Final Phoenix MWD Survey
8,531.00	8,510.88	44.38	312.63	Projection to TD

Checked By: _____ Approved By: _____ Date: _____

Directional Survey

Well Name	Lease	Field Name	Business Unit
SALADO DRAW WE 14 FED P5 002H		JENNINGS	Mid-Continent

Ground Elevation (ft)	Original RKB (ft)	Current RKB Elevation	Mud Line Elevation (ft)	Water Depth (ft)
3,157.00	3,189.60	3,189.60, 6/3/2016		

Wellbore Name	Parent Wellbore	Min Kick Off Depth (ftKB)	Vertical Section Direction (°)
Original Hole	Original Hole		359.80

Northing (Y) (ft)	Easting (X) (ft)	UTM Grid Zone

Date	Definitive?	Description	Planned?
6/15/2016	Y	MWD	N

MD Tie In (ftKB)	TVDTie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	NSTie In (ft)	EWTie In (ft)

Survey Data

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Method	Survey Company	Build (°/100ft)	Depart (ft)	Turn (°/100ft)	Unused data
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Magn MWD		0.00	0.00	0.00	N
186	0.60	351.70	186.00	0.96	-0.14	0.96	0.32	Magn MWD		0.32	0.97	189.09	N
268	0.80	353.70	267.99	1.96	-0.27	1.96	0.25	Magn MWD		0.24	1.98	2.44	N
361	0.60	324.70	360.98	3.00	-0.62	3.00	0.43	Magn MWD		-0.22	3.06	-31.18	N
457	0.70	302.70	456.98	3.73	-1.40	3.73	0.28	Magn MWD		0.10	3.98	-22.92	N
548	0.60	342.70	547.97	4.48	-2.01	4.49	0.50	Magn MWD		-0.11	4.91	43.96	N
639	0.60	362.70	638.97	5.41	-2.13	5.42	0.23	Magn MWD		0.00	5.82	21.98	N
658	0.60	349.70	657.97	5.61	-2.14	5.62	0.71	Magn MWD		0.00	6.01	-68.42	N
856	0.70	339.80	855.95	7.77	-2.75	7.78	0.08	Magn MWD	Phoenix Directional	0.05	8.24	-5.00	N
1,034	0.80	311.50	1,033.94	9.61	-4.05	9.62	0.21	Magn MWD	Phoenix Directional	0.06	10.43	-15.90	N
1,211	1.00	70.10	1,210.93	10.95	-3.53	10.97	0.88	Magn MWD	Phoenix Directional	0.11	11.51	-136.38	N
1,389	3.80	97.80	1,388.76	10.68	3.78	10.67	1.66	Magn MWD	Phoenix Directional	1.57	11.33	15.56	N
1,567	7.70	80.90	1,565.84	11.77	21.41	11.69	2.37	Magn MWD	Phoenix Directional	2.19	24.43	-9.49	N
1,745	6.90	86.10	1,742.40	14.38	43.85	14.23	0.58	Magn MWD	Phoenix Directional	-0.45	46.15	2.92	N
1,923	6.60	83.00	1,919.16	16.36	64.67	16.13	0.27	Magn MWD	Phoenix Directional	-0.17	66.71	-1.74	N
2,100	6.70	81.60	2,094.97	19.10	84.98	18.81	0.11	Magn MWD	Phoenix Directional	0.06	87.10	-0.79	N
2,277	7.00	80.90	2,270.71	22.32	105.84	21.95	0.18	Magn MWD	Phoenix Directional	0.17	108.17	-0.40	N
2,454	7.30	81.20	2,446.33	25.74	127.61	25.30	0.17	Magn MWD	Phoenix Directional	0.17	130.18	0.17	N
2,632	7.40	80.20	2,622.87	29.42	150.08	28.90	0.09	Magn MWD	Phoenix Directional	0.06	152.94	-0.56	N
2,809	7.60	76.70	2,798.36	34.06	172.70	33.45	0.28	Magn MWD	Phoenix Directional	0.11	176.03	-1.98	N
2,986	7.60	76.40	2,973.80	39.50	195.47	38.82	0.02	Magn MWD	Phoenix Directional	0.00	199.42	-0.17	N
3,164	8.00	75.20	3,150.15	45.43	218.89	44.67	0.24	Magn MWD	Phoenix Directional	0.22	223.55	-0.67	N
3,342	7.80	80.90	3,326.47	50.51	242.79	49.66	0.45	Magn MWD	Phoenix Directional	-0.11	247.99	3.20	N
3,520	6.20	92.80	3,503.14	51.95	264.32	51.03	1.21	Magn MWD	Phoenix Directional	-0.90	269.37	6.69	N
3,698	6.30	90.70	3,680.09	51.36	283.68	50.37	0.14	Magn MWD	Phoenix Directional	0.06	288.30	-1.18	N
3,875	6.20	91.60	3,856.04	50.98	302.95	49.92	0.08	Magn MWD	Phoenix Directional	-0.06	307.21	0.51	N
4,053	4.00	98.50	4,033.32	49.79	318.70	48.68	1.28	Magn MWD	Phoenix Directional	-1.24	322.56	3.88	N

Report Printed: 10/5/2016

Directional Survey

Well Name	Lease	Field Name	Business Unit
SALADO DRAW WE 14 FED P5 002H		JENNINGS	Mid-Continent

Ground Elevation (ft)	Original RKB (ft)	Current RKB Elevation	Mud Line Elevation (ft)	Water Depth (ft)
3,157.00	3,189.60	3,189.60, 6/3/2016		

Survey Data

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Method	Survey Company	Build (°/100ft)	Depart (ft)	Turn (°/100ft)	Unused data
4,230	0.60	239.50	4,210.19	48.41	324.01	47.27	2.53	Magn MWD	Phoenix Directional	-1.92	327.60	79.66	N
4,408	0.70	256.10	4,388.18	47.67	322.15	46.55	0.12	Magn MWD	Phoenix Directional	0.06	325.66	9.33	N
4,482	0.80	248.60	4,462.17	47.37	321.23	46.25	0.19	Magn MWD	Phoenix Directional	0.14	324.71	-10.14	N
4,599	0.70	255.10	4,579.16	46.89	319.78	45.78	0.11	Magn MWD	Phoenix Directional	-0.09	323.20	5.56	N
4,777	1.00	255.10	4,757.14	46.21	317.23	45.11	0.17	Magn MWD	Phoenix Directional	0.17	320.58	0.00	N
4,954	0.70	246.40	4,934.12	45.38	314.74	44.28	0.18	Magn MWD	Phoenix Directional	-0.17	318.00	-4.92	N
5,131	1.00	224.00	5,111.10	43.84	312.68	42.75	0.25	Magn MWD	Phoenix Directional	0.17	315.74	-12.66	N
5,309	0.90	240.80	5,289.08	42.04	310.38	40.96	0.17	Magn MWD	Phoenix Directional	-0.06	313.22	9.44	N
5,486	0.40	317.30	5,466.07	41.82	308.75	40.74	0.51	Magn MWD	Phoenix Directional	-0.28	311.57	43.22	N
5,664	0.40	296.70	5,644.07	42.55	307.77	41.48	0.08	Magn MWD	Phoenix Directional	0.00	310.70	-11.57	N
5,841	0.70	299.00	5,821.06	43.35	306.27	42.28	0.17	Magn MWD	Phoenix Directional	0.17	309.33	1.30	N
6,019	1.00	55.50	5,999.05	44.76	306.60	43.69	0.82	Magn MWD	Phoenix Directional	0.17	309.85	-136.80	N
6,196	1.10	35.70	6,176.02	47.02	308.87	45.94	0.21	Magn MWD	Phoenix Directional	0.06	312.43	-11.19	N
6,373	1.00	48.00	6,352.99	49.43	311.01	48.34	0.14	Magn MWD	Phoenix Directional	-0.06	314.91	6.95	N
6,551	0.90	34.90	6,530.96	51.61	312.96	50.52	0.13	Magn MWD	Phoenix Directional	-0.06	317.19	-7.36	N
6,728	0.70	54.70	6,707.95	53.38	314.64	52.28	0.19	Magn MWD	Phoenix Directional	-0.11	319.14	11.19	N
6,905	0.20	78.10	6,884.94	54.07	315.82	52.97	0.30	Magn MWD	Phoenix Directional	-0.28	320.42	13.22	N
7,082	0.20	217.40	7,061.94	53.89	315.94	52.78	0.21	Magn MWD	Phoenix Directional	0.00	320.50	78.70	N
7,260	0.30	265.70	7,239.94	53.60	315.29	52.50	0.13	Magn MWD	Phoenix Directional	0.06	319.81	27.13	N
7,438	0.60	211.60	7,417.93	52.78	314.33	51.68	0.27	Magn MWD	Phoenix Directional	0.17	318.73	-30.39	N
7,615	0.80	210.20	7,594.93	51.19	313.38	50.09	0.01	Magn MWD	Phoenix Directional	0.00	317.53	-0.79	N
7,792	1.00	211.40	7,771.91	49.07	312.11	47.98	0.23	Magn MWD	Phoenix Directional	0.23	315.94	0.68	N
7,969	0.20	34.70	7,948.90	48.00	311.48	46.91	0.68	Magn MWD	Phoenix Directional	-0.45	315.16	-99.83	N
8,147	0.30	115.00	8,126.90	48.06	312.08	46.97	0.19	Magn MWD	Phoenix Directional	0.06	315.76	45.11	N
8,325	0.70	164.90	8,304.89	46.81	312.79	45.72	0.31	Magn MWD	Phoenix Directional	0.22	316.27	28.03	N
8,474	0.70	195.20	8,453.88	45.06	312.78	43.96	0.25	Magn MWD	Phoenix Directional	0.00	316.01	20.34	N
8,580	6.99	3.59	8,559.64	50.88	313.02	49.78	7.24	Magn MWD	Baker Hughes	5.93	317.13	-180.76	N
8,629	13.53	0.67	8,607.83	59.59	313.27	58.50	13.38	Magn MWD	Baker Hughes	13.35	318.89	-5.96	N
8,718	26.61	354.11	8,691.26	89.97	311.34	88.88	14.89	Magn MWD	Baker Hughes	14.70	324.08	397.12	N
8,807	36.38	355.73	8,767.05	136.23	307.32	135.15	11.02	Magn MWD	Baker Hughes	10.98	336.16	1.82	N

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Directional Survey

Well Name	Lease	Field Name	Business Unit
SALADO DRAW WE 14 FED P5 002H		JENNINGS	Mid-Continent

Ground Elevation (ft)	Original RKB (ft)	Current RKB Elevation	Mud Line Elevation (ft)	Water Depth (ft)
3,157.00	3,189.60	3,189.60, 6/3/2016		

Survey Data

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Method	Survey Company	Build (°/100ft)	Depart (ft)	Turn (°/100ft)	Unused data
8,895	42.84	2.88	8,834.85	192.22	306.88	191.15	8.97	Magn MWD	Baker Hughes	7.34	362.11	-400.97	N
8,984	49.47	355.97	8,896.51	256.29	306.02	255.22	9.31	Magn MWD	Baker Hughes	7.45	399.17	396.73	N
9,072	59.27	358.02	8,947.71	327.63	302.35	326.57	11.30	Magn MWD	Baker Hughes	11.14	445.83	2.33	N
9,161	69.96	2.59	8,985.83	407.89	302.92	406.83	12.87	Magn MWD	Baker Hughes	12.01	508.07	-399.36	N
9,249	81.51	2.25	9,007.47	492.96	306.51	491.88	13.13	Magn MWD	Baker Hughes	13.13	580.48	-0.39	N
9,338	88.61	359.00	9,015.13	581.55	307.47	580.48	8.77	Magn MWD	Baker Hughes	7.98	657.83	400.84	N
9,426	88.31	0.48	9,017.50	669.52	307.07	668.44	1.72	Magn MWD	Baker Hughes	-0.34	736.58	-407.41	N
9,515	88.34	1.27	9,020.10	758.47	308.42	757.39	0.89	Magn MWD	Baker Hughes	0.03	818.78	0.89	N
9,603	88.86	2.18	9,022.25	846.40	311.07	845.31	1.19	Magn MWD	Baker Hughes	0.59	901.75	1.03	N
9,692	88.64	2.80	9,024.19	935.30	314.94	934.19	0.74	Magn MWD	Baker Hughes	-0.25	986.90	0.70	N
9,781	88.95	0.44	9,026.06	1,024.23	317.45	1,023.12	2.67	Magn MWD	Baker Hughes	0.35	1,072.30	-2.65	N
9,870	88.95	358.05	9,027.70	1,113.21	316.28	1,112.09	2.68	Magn MWD	Baker Hughes	0.00	1,157.26	401.81	N
9,958	89.94	358.33	9,028.55	1,201.16	313.50	1,200.05	1.17	Magn MWD	Baker Hughes	1.12	1,241.39	0.32	N
10,047	89.54	359.12	9,028.95	1,290.13	311.52	1,289.04	0.99	Magn MWD	Baker Hughes	-0.45	1,327.21	0.89	N
10,136	90.00	356.89	9,029.31	1,379.07	308.42	1,377.99	2.56	Magn MWD	Baker Hughes	0.52	1,413.14	-2.51	N
10,225	90.03	355.17	9,029.29	1,467.85	302.26	1,466.79	1.93	Magn MWD	Baker Hughes	0.03	1,498.65	-1.93	N
10,313	90.06	357.38	9,029.22	1,555.66	296.55	1,554.62	2.51	Magn MWD	Baker Hughes	0.03	1,583.68	2.51	N
10,401	90.52	359.17	9,028.77	1,643.62	293.90	1,642.58	2.10	Magn MWD	Baker Hughes	0.52	1,669.69	2.03	N
10,489	90.03	359.77	9,028.35	1,731.61	293.08	1,730.58	0.88	Magn MWD	Baker Hughes	-0.56	1,756.24	0.68	N
10,578	90.09	359.81	9,028.26	1,820.61	292.76	1,819.58	0.08	Magn MWD	Baker Hughes	0.07	1,844.00	0.04	N
10,666	90.00	359.01	9,028.19	1,908.61	291.85	1,907.58	0.91	Magn MWD	Baker Hughes	-0.10	1,930.79	-0.91	N
10,755	90.06	358.85	9,028.14	1,997.59	290.19	1,996.57	0.19	Magn MWD	Baker Hughes	0.07	2,018.56	-0.18	N
10,844	89.88	0.74	9,028.19	2,086.59	289.87	2,085.56	2.13	Magn MWD	Baker Hughes	-0.20	2,106.62	-402.37	N
10,932	89.88	1.86	9,028.37	2,174.56	291.87	2,173.53	1.27	Magn MWD	Baker Hughes	0.00	2,194.06	1.27	N
11,021	90.20	2.70	9,028.31	2,263.49	295.41	2,262.45	1.01	Magn MWD	Baker Hughes	0.36	2,282.69	0.94	N
11,109	90.30	4.70	9,027.92	2,351.30	301.09	2,350.24	2.28	Magn MWD	Baker Hughes	0.11	2,370.50	2.27	N
11,198	90.40	3.00	9,027.38	2,440.10	307.06	2,439.01	1.91	Magn MWD	Baker Hughes	0.11	2,459.34	-1.91	N
11,286	90.00	0.90	9,027.07	2,528.04	310.05	2,526.94	2.43	Magn MWD	Baker Hughes	-0.45	2,546.98	-2.39	N
11,375	90.00	357.50	9,027.07	2,617.02	308.81	2,615.92	3.82	Magn MWD	Baker Hughes	0.00	2,635.18	400.67	N
11,464	90.50	357.20	9,026.69	2,705.92	304.70	2,704.84	0.66	Magn MWD	Baker Hughes	0.56	2,723.02	-0.34	N

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Directional Survey

Well Name	Lease	Field Name	Business Unit
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3,157.00	3,189.60	3,189.60, 6/3/2016		

Survey Data

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Method	Survey Company	Build (°/100ft)	Depart (ft)	Turn (°/100ft)	Unused data
11,552	88.60	357.80	9,027.38	2,793.83	300.86	2,792.76	2.26	Magn MWD	Baker Hughes	-2.16	2,809.98	0.68	N
11,640	88.58	358.55	9,029.54	2,881.76	298.06	2,880.70	0.85	Magn MWD	Baker Hughes	-0.02	2,897.13	0.85	N
11,729	88.46	358.50	9,031.84	2,970.70	295.77	2,969.65	0.15	Magn MWD	Baker Hughes	-0.13	2,985.39	-0.06	N
11,818	88.52	358.39	9,034.19	3,059.64	293.35	3,058.59	0.14	Magn MWD	Baker Hughes	0.07	3,073.67	-0.12	N
11,906	89.85	0.20	9,035.44	3,147.61	292.27	3,146.58	2.55	Magn MWD	Baker Hughes	1.51	3,161.16	-407.03	N
11,995	90.52	359.36	9,035.15	3,236.61	291.93	3,235.57	1.21	Magn MWD	Baker Hughes	0.75	3,249.75	403.55	N
12,084	90.77	358.32	9,034.15	3,325.59	290.13	3,324.55	1.20	Magn MWD	Baker Hughes	0.28	3,338.22	-1.17	N
12,173	90.59	2.42	9,033.09	3,414.56	290.70	3,413.52	4.61	Magn MWD	Baker Hughes	-0.20	3,426.91	-399.89	N
12,261	90.99	1.88	9,031.88	3,502.49	294.00	3,501.44	0.76	Magn MWD	Baker Hughes	0.45	3,514.81	-0.61	N
12,350	91.05	1.61	9,030.29	3,591.43	296.71	3,590.38	0.31	Magn MWD	Baker Hughes	0.07	3,603.67	-0.30	N
12,439	90.99	359.42	9,028.71	3,680.41	297.51	3,679.35	2.46	Magn MWD	Baker Hughes	-0.07	3,692.42	402.03	N
12,527	91.23	0.52	9,027.01	3,768.39	297.47	3,767.33	1.28	Magn MWD	Baker Hughes	0.27	3,780.12	-407.84	N
12,616	91.26	359.10	9,025.07	3,857.37	297.17	3,856.31	1.60	Magn MWD	Baker Hughes	0.03	3,868.80	402.90	N
12,705	91.80	357.40	9,022.69	3,946.29	294.45	3,945.24	2.00	Magn MWD	Baker Hughes	0.61	3,957.26	-1.91	N
12,794	91.80	359.70	9,019.90	4,035.21	292.20	4,034.17	2.58	Magn MWD	Baker Hughes	0.00	4,045.78	2.58	N
12,882	91.69	1.96	9,017.22	4,123.16	293.48	4,122.11	2.57	Magn MWD	Baker Hughes	-0.12	4,133.59	-406.52	N
12,971	91.91	1.22	9,014.42	4,212.08	295.95	4,211.02	0.87	Magn MWD	Baker Hughes	0.25	4,222.46	-0.83	N
13,060	90.90	358.80	9,012.24	4,301.04	295.96	4,299.99	2.95	Magn MWD	Baker Hughes	-1.13	4,311.22	401.78	N
13,149	91.10	359.90	9,010.69	4,390.02	294.95	4,388.97	1.26	Magn MWD	Baker Hughes	0.22	4,399.92	1.24	N
13,237	91.00	0.90	9,009.07	4,478.01	295.57	4,476.95	1.14	Magn MWD	Baker Hughes	-0.11	4,487.75	-407.95	N
13,326	91.10	0.90	9,007.44	4,566.98	296.96	4,565.92	0.11	Magn MWD	Baker Hughes	0.11	4,576.62	0.00	N
13,414	91.00	359.10	9,005.83	4,654.96	296.96	4,653.90	2.05	Magn MWD	Baker Hughes	-0.11	4,664.42	407.05	N
13,508	90.80	359.40	9,004.35	4,748.94	295.73	4,747.88	0.38	Magn MWD	Baker Hughes	-0.21	4,758.14	0.32	N
13,591	90.80	359.90	9,003.20	4,831.93	295.23	4,830.87	0.60	Magn MWD	Baker Hughes	0.00	4,840.94	0.60	N
13,680	90.70	1.20	9,002.03	4,920.92	296.08	4,919.85	1.46	Magn MWD	Baker Hughes	-0.11	4,929.82	-403.03	N
13,769	90.70	0.80	9,000.94	5,009.90	297.63	5,008.83	0.45	Magn MWD	Baker Hughes	0.00	5,018.73	-0.45	N
13,858	90.80	1.80	8,999.78	5,098.87	299.65	5,097.79	1.13	Magn MWD	Baker Hughes	0.11	5,107.66	1.12	N
13,892	90.70	0.40	8,999.33	5,132.86	300.31	5,131.78	4.13	Magn MWD	Baker Hughes	-0.29	5,141.63	-4.12	N
13,917	90.70	0.40	8,999.03	5,157.85	300.48	5,156.77	0.00	Extrap	Baker Hughes	0.00	5,166.60	0.00	N

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