

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTNM OIL CONSERVATION
ARTESIA DISTRICT

JUN 30 2014

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS RECEIVED**
*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. NMNM44594
2. Name of Operator DEVON ENERGY PRODUCTION CO. LP		6. If Indian, Allottee or Tribe Name
3a. Address 333 WEST SHERIDAN AVENUE OKC, OK 73102		7. If Unit or CA/Agreement, Name and/or No.
3b. Phone No. (include area code) Ph: 405-552-7970		8. Well Name and No. AQUILLA 22 FED COM 1H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 22 T19S R31E 990FNL 50FEL		9. API Well No. 30-015-40627
		10. Field and Pool, or Exploratory LUSK; BONE SPRING WEST
		11. County or Parish, and State EDDY 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	
	☐ 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 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.)

Per Wesley Ingram's verbal approval:

Devon Energy Production Company, LP respectfully requests to repair 5-1/2" casing and braiden-head cement squeeze as per attached procedure.

See Attachments: Procedure
Pump-In-Tracer
Radial Cement Bond Log
Wellbore Sketch
Casing TallyNM OIL CONSERVATION
ARTESIA DISTRICT
JUN 30 2014Accepted for record
NMOCD
NM OIL CONSERVATION
ARTESIA DISTRICT
JUN 30 2014

Submit Subsequent Report for remedial work with CBL.

14. I hereby certify that the foregoing is true and correct.	
Electronic Submission #200545 verified by the BLM Well Information System For DEVON ENERGY PRODUCTION CO., LP, sent to the Carlsbad Committed to AFMSS for processing by KURT SIMMONS on 03/04/2013 ()	
Name (Printed/Typed) ERIN L WORKMAN	Title REGULATORY COMPLIANCE ASSOC.
Signature (Electronic Submission)	Date 03/04/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____	Title _____	Date JUN 23 2014
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.

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

Additional data for EC transaction #200545 that would not fit on the form

32. Additional remarks, continued

Thank You!

Aquila 22 Fed Com 1H

30-015-40627

Sec. 22-T19S-R31S

03/04/13

Sundry to repair 5-1/2" Casing and Braiden –Head Cement Squeeze

PROPOSAL:

Attempt to back off 5-1/2" production casing at +/- 419' MD and POOH. Run in the hole with new 5-1/2" production casing, screw into stub at ~419' MD, PU on casing and set slips. Pressure test casing. Attempt braiden-head cement squeeze down 5-1/2" x 9-5/8" annulus (see below), and run cement bond log. Drill remaining cement from 9,131' MD to 13,766', pressure test 5-1/2" casing, and resume with frac operations to complete lateral.

WELL ISSUE:

(11-19-12) Dropped wrong displacement plug during Stage 1 of 2 cement job, which inadvertently closed DV Tool instead of displacing cement to float collar. Called Joe Salcido w/ BLM – cement inside 5-1/2" production casing from 5,510' MD (DV tool) to 13,786' MD (Float Collar).

(2-4-13 to 2-21-13) MIRU PU – drilled out DV Tool and drilled cement from 5,510' MD down to 9,131' MD. Started to lose water/circulation.

(2-22-13) RIH w/ packer/plug – isolated hole in 5-1/2" production casing between 354'-359'.

(2-25-13) MIRU E-line and ran CBL from 9,020' to surface:

TOC	7,812'
Good Cmt	7,812' – 9,020'
Cmt Stringers	6,980' – 7,812'
Casing Hole	350'

(2-26-13) Ran tracer log. Established pump-in rate down 5-1/2" x 9-5/8" annulus at 1.8 BPM and 700 psi. Pumped radioactive material at 1.8 BPM. RIH w/ tracer log, GR, CCL, and temperature log – lost 70% of tracer between 4,590' and 4,750'. Chased remaining tracer to 4,980'. NOTE: 9-5/8" shoe at 4,300' MD. Called BLM and discussed well situation with Wesley Ingram. Received verbal approval to proceed with backing off 5-1/2" production and attempt to pump braiden-head squeeze.

FORWARD PROCEDURE:

1. Hold Pre-job Safety meeting on picking up casing. ND BOPE and B section.
2. RIH w/ 5-1/2" 17# spear – attempt to spear casing and pick up off slips.
3. Pull slips, slack off and stack out casing.
4. RIH w/ back off tool – attempt to back off casing at collar (419'). POOH w/ casing.
5. Visually inspect casing joints and failure.
6. RIH w/ 5-1/2" casing, replace joints if needed, and screw back into casing stub.
7. NU wellhead and test casing.

8. Attempt to braiden-head squeeze (5-1/2" x 9-5/8") with ~260 SX 14.8 PPG Class "C" cement (open-hole), followed by ~400 SX 11.4 PPG Class "C" with additives (pipe-in-pipe).
9. MIRU E-line – run cement bond log.
10. Drill remaining cement in 5-1/2" casing from 9,131' MD to 13,766' and resume fracture stimulation operations to complete lateral.



AQUILA 22 FED COM 1H

WEST UNRESTRICTED

Casing Tally

PRODUCTION, Set Depth: 13,812.0ftKB

District PERMIAN BASIN	County EDDY	Field Name HACKBERRY	Project Group DELAWARE BASIN	State/Province NM
Surface Legal Location SEC22 T19S R31E	API/UWI 3001540627	Latitude (°) 32° 39' 1.785" N	Longitude (°) 103° 50' 55.366" W	Ground Elev... 3,535.90
			KB - GL (ft) 26.20	Orig KB Elev (ft) 3,562.10
				Tubing Head Elevation (ft)

Casing Run Tally

Run?	Run #	Ref #	Len (ft)	Item Des	OD (in)	Wt (lb/ft)	Grade	ID (in)	Top Thread	Centrali zed?	Ext Jwry	Cum Len (ft)	Top (ftKB)	Vol Disp Cum (bbl)
Yes	1		2.00	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		2.00	13,810.0	0.0
Yes	2	1	42.45	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	44.45	13,767.6	0.3
Yes	3		1.50	Float Collar	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		45.95	13,766.1	0.3
Yes	4	2	41.32	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	87.27	13,724.7	0.5
Yes	5	3	43.13	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	130.40	13,681.6	0.8
Yes	6	4	43.16	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		173.56	13,638.4	1.1
Yes	7	5	44.11	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	217.67	13,594.3	1.3
Yes	8	6	42.75	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		260.42	13,551.6	1.6
Yes	9	7	44.75	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	305.17	13,506.8	1.9
Yes	10	8	44.58	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		349.75	13,462.3	2.1
Yes	11	9	36.98	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	386.73	13,425.3	2.4
Yes	12	10	45.08	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		431.81	13,380.2	2.7
Yes	13	11	44.15	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	475.96	13,336.0	2.9
Yes	14	12	44.03	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		519.99	13,292.0	3.2
Yes	15	13	42.49	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	562.48	13,249.5	3.5
Yes	16	14	40.85	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		603.33	13,208.7	3.7
Yes	17	326	20.87	Marker Joint	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	624.20	13,187.8	3.8
Yes	18	15	43.76	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		667.96	13,144.0	4.1
Yes	19	16	43.69	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	711.65	13,100.4	4.4
Yes	20	17	38.38	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		750.03	13,062.0	4.6
Yes	21	18	44.20	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	794.23	13,017.8	4.9
Yes	22	19	42.83	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		837.06	12,974.9	5.1
Yes	23	20	41.84	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	878.90	12,933.1	5.4
Yes	24	21	43.68	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		922.58	12,889.4	5.7
Yes	25	22	42.36	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	964.94	12,847.1	5.9
Yes	26	23	42.07	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		1,007.01	12,805.0	6.2
Yes	27	24	43.13	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	1,050.14	12,761.9	6.4
Yes	28	25	44.67	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		1,094.81	12,717.2	6.7
Yes	29	26	42.68	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	1,137.49	12,674.5	7.0
Yes	30	27	43.04	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		1,180.53	12,631.5	7.2



AQUILA 22 FED COM 1H

WEST UNRESTRICTED

Casing Tally

PRODUCTION, Set Depth: 13,812.0ftKB

District PERMIAN BASIN	County EDDY	Field Name HACKBERRY	Project Group DELAWARE BASIN	State/Province NM
Surface Legal Location SEC22 T19S R31E	API/UWI 3001540627	Latitude (°) 32° 39' 1.785" N	Longitude (°) 103° 50' 55.366" W	Ground Elev... 3,535.90
			KB - GL (ft) 26.20	Orig KB Elev (ft) 3,562.10
				Tubing Head Elevation (ft)

Casing Run Tally

Run?	Run #	Ref #	Len (ft)	Item Des	OD (in)	Wt (lb/ft)	Grade	ID (in)	Top Thread	Centrali zed?	Ext Jwlry	Cum Len (ft)	Top (ftKB)	Vol Disp Cum (bbl)
Yes	31	28	42.85	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	1,223.38	12,588.6	7.5
Yes	32	29	41.58	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		1,264.96	12,547.0	7.8
Yes	33	30	41.74	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	1,306.70	12,505.3	8.0
Yes	34	31	44.14	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		1,350.84	12,461.2	8.3
Yes	35	32	43.16	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	1,394.00	12,418.0	8.6
Yes	36	33	43.33	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		1,437.33	12,374.7	8.8
Yes	37	34	42.92	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	1,480.25	12,331.8	9.1
Yes	38	35	42.82	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		1,523.07	12,288.9	9.3
Yes	39	36	41.89	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	1,564.96	12,247.0	9.6
Yes	40	37	42.62	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		1,607.58	12,204.4	9.9
Yes	41	38	43.89	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	1,651.47	12,160.5	10.1
Yes	42	39	41.57	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		1,693.04	12,119.0	10.4
Yes	43	40	42.46	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	1,735.50	12,076.5	10.7
Yes	44	41	41.95	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		1,777.45	12,034.6	10.9
Yes	45	42	44.98	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	1,822.43	11,989.6	11.2
Yes	46	43	44.02	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		1,866.45	11,945.6	11.5
Yes	47	44	42.54	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	1,908.99	11,903.0	11.7
Yes	48	45	40.01	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		1,949.00	11,863.0	12.0
Yes	49	46	44.14	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	1,993.14	11,818.9	12.2
Yes	50	47	43.50	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		2,036.64	11,775.4	12.5
Yes	51	48	41.23	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	2,077.87	11,734.1	12.8
Yes	52	49	43.09	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		2,120.96	11,691.0	13.0
Yes	53	50	42.92	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	2,163.88	11,648.1	13.3
Yes	54	51	42.12	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		2,206.00	11,606.0	13.5
Yes	55	52	45.62	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	2,251.62	11,560.4	13.8
Yes	56	53	42.61	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		2,294.23	11,517.8	14.1
Yes	57	54	44.55	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	2,338.78	11,473.2	14.4
Yes	58	55	44.36	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		2,383.14	11,428.9	14.6
Yes	59	56	44.14	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	2,427.28	11,384.7	14.9
Yes	60	57	43.87	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		2,471.15	11,340.9	15.2



AQUILA 22 FED COM 1H

WEST UNRESTRICTED

Casing Tally

PRODUCTION, Set Depth: 13,812.0ftKB

District	County	Field Name	Project Group	State/Province			
PERMIAN BASIN	EDDY	HACKBERRY	DELAWARE BASIN	NM			
Surface Legal Location	API/UWI	Latitude (°)	Longitude (°)	Ground Elev...	KB - GL (ft)	Orig KB Elev (ft)	Tubing Head Elevation (ft)
SEC22 T19S R31E	3001540627	32° 39' 1.785" N	103° 50' 55.366" W	3,535.90	26.20	3,562.10	

Casing Run Tally

Run?	Run #	Ref #	Len (ft)	Item Des	OD (in)	Wt (lb/ft)	Grade	ID (in)	Top Thread	Centrali zed?	Ext Jwlry	Cum Len (ft)	Top (ftKB)	Vol Disp Cum (bbl)
Yes	61	58	35.81	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	2,506.96	11,305.0	15.4
Yes	62	59	43.97	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		2,550.93	11,261.1	15.7
Yes	63	60	43.32	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	2,594.25	11,217.8	15.9
Yes	64	61	39.14	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		2,633.39	11,178.6	16.2
Yes	65	62	43.20	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	2,676.59	11,135.4	16.4
Yes	66	63	39.39	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		2,715.98	11,096.0	16.7
Yes	67	64	44.34	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	2,760.32	11,051.7	16.9
Yes	68	65	42.90	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		2,803.22	11,008.8	17.2
Yes	69	66	42.65	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	2,845.87	10,966.1	17.5
Yes	70	67	38.75	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		2,884.62	10,927.4	17.7
Yes	71	68	39.64	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	2,924.26	10,887.7	17.9
Yes	72	69	43.91	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		2,968.17	10,843.8	18.2
Yes	73	70	34.17	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	3,002.34	10,809.7	18.4
Yes	74	71	42.11	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		3,044.45	10,767.6	18.7
Yes	75	72	43.25	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	3,087.70	10,724.3	19.0
Yes	76	73	43.95	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		3,131.65	10,680.4	19.2
Yes	77	74	44.38	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	3,176.03	10,636.0	19.5
Yes	78	75	40.36	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		3,216.39	10,595.6	19.7
Yes	79	76	44.16	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	3,260.55	10,551.5	20.0
Yes	80	77	42.06	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		3,302.61	10,509.4	20.3
Yes	81	78	42.65	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	3,345.26	10,466.7	20.5
Yes	82	79	41.73	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		3,386.99	10,425.0	20.8
Yes	83	80	36.09	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	3,423.08	10,388.9	21.0
Yes	84	81	44.53	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		3,467.61	10,344.4	21.3
Yes	85	82	42.53	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	3,510.14	10,301.9	21.5
Yes	86	83	39.76	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		3,549.90	10,262.1	21.8
Yes	87	84	42.06	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	3,591.96	10,220.0	22.0
Yes	88	85	42.71	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		3,634.67	10,177.3	22.3
Yes	89	86	42.35	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	3,677.02	10,135.0	22.6
Yes	90	87	41.26	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		3,718.28	10,093.7	22.8



AQUILA 22 FED COM 1H

WEST UNRESTRICTED

Casing Tally

PRODUCTION, Set Depth: 13,812.0ftKB

District PERMIAN BASIN	County EDDY	Field Name HACKBERRY	Project Group DELAWARE BASIN	State/Province NM			
Surface Legal Location SEC22 T19S R31E	API/UWI 3001540627	Latitude (") 32° 39' 1.785" N	Longitude (") 103° 50' 55.366" W	Ground Elev... 3,535.90	KB - GL (ft) 26.20	Orig KB Elev (ft) 3,562.10	Tubing Head Elevation (ft)

Casing Run Tally

Run?	Run #	Ref #	Len (ft)	Item Des	OD (in)	Wt (lb/ft)	Grade	ID (in)	Top Thread	Centrali- zed?	Ext Jwly	Cum Len (ft)	Top (ftKB)	Vol Disp Cum (bbl)
Yes	91	88	41.54	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	3,759.82	10,052.2	23.1
Yes	92	89	44.83	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No	/	3,804.65	10,007.4	23.4
Yes	93	90	43.00	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	3,847.65	9,964.4	23.6
Yes	94	91	44.22	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		3,891.87	9,920.1	23.9
Yes	95	92	45.30	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	3,937.17	9,874.8	24.2
Yes	96	93	45.06	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		3,982.23	9,829.8	24.4
Yes	97	94	34.03	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	4,016.26	9,795.7	24.7
Yes	98	95	43.99	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		4,060.25	9,751.8	24.9
Yes	99	325	22.28	Marker Joint	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	4,082.53	9,729.5	25.1
Yes	100	96	43.32	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		4,125.85	9,686.2	25.3
Yes	101	97	44.20	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	4,170.05	9,642.0	25.6
Yes	102	98	44.49	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		4,214.54	9,597.5	25.9
Yes	103	99	37.89	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	4,252.43	9,559.6	26.1
Yes	104	100	43.28	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		4,295.71	9,516.3	26.4
Yes	105	101	41.85	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	4,337.56	9,474.4	26.6
Yes	106	102	45.07	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		4,382.63	9,429.4	26.9
Yes	107	103	41.87	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	4,424.50	9,387.5	27.2
Yes	108	104	42.97	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		4,467.47	9,344.5	27.4
Yes	109	105	44.08	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	4,511.55	9,300.5	27.7
Yes	110	106	44.25	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		4,555.80	9,256.2	28.0
Yes	111	107	44.39	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	4,600.19	9,211.8	28.2
Yes	112	108	42.55	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		4,642.74	9,169.3	28.5
Yes	113	109	43.21	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	4,685.95	9,126.1	28.8
Yes	114	110	41.22	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		4,727.17	9,084.8	29.0
Yes	115	111	43.24	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	4,770.41	9,041.6	29.3
Yes	116	112	42.39	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		4,812.80	8,999.2	29.5
Yes	117	113	43.87	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	4,856.67	8,955.3	29.8
Yes	118	114	41.59	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		4,898.26	8,913.7	30.1
Yes	119	115	41.32	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	4,939.58	8,872.4	30.3
Yes	120	116	44.16	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		4,983.74	8,828.3	30.6

AQUILA 22 FED COM 1H

WEST UNRESTRICTED

devon

Casing Tally

PRODUCTION, Set Depth: 13,812.0ftKB

District PERMIAN BASIN	County EDDY	Field Name HACKBERRY	Project Group DELAWARE BASIN	State/Province NM
Surface Legal Location SEC22 T19S R31E	API/UWI 3001540627	Latitude (") 32° 39' 1.785" N	Longitude (") 103° 50' 55.366" W	Ground Elev... 3,535.90
			KB - GL (ft) 26.20	Orig KB Elev (ft) 3,562.10
				Tubing Head Elevation (ft)

Casing Run Tally

Run?	Run #	Ref #	Len (ft)	Item Des	OD (in)	Wt (lb/ft)	Grade	ID (in)	Top Thread	Centralized?	Ext Jwry	Cum Len (ft)	Top (ftKB)	Vol Disp Cum (bbl)
Yes	121	117	44.07	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	5,027.81	8,784.2	30.9
Yes	122	118	41.12	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		5,068.93	8,743.1	31.1
Yes	123	119	41.00	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	5,109.93	8,702.1	31.4
Yes	124	120	42.28	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		5,152.21	8,659.8	31.6
Yes	125	121	40.58	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	5,192.79	8,619.2	31.9
Yes	126	122	44.40	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		5,237.19	8,574.8	32.1
Yes	127	123	43.72	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	5,280.91	8,531.1	32.4
Yes	128	124	33.49	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		5,314.40	8,497.6	32.6
Yes	129	125	42.83	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	5,357.23	8,454.8	32.9
Yes	130	126	45.16	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		5,402.39	8,409.6	33.2
Yes	131	127	43.42	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	5,445.81	8,366.2	33.4
Yes	132	128	44.69	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		5,490.50	8,321.5	33.7
Yes	133	129	43.63	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	5,534.13	8,277.9	34.0
Yes	134	130	42.64	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		5,576.77	8,235.2	34.2
Yes	135	131	43.97	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	5,620.74	8,191.3	34.5
Yes	136	132	45.26	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	No		5,666.00	8,146.0	34.8
Yes	137	133	41.84	Casing Joints	5 1/2	17.00	P-110	4.892	BUTTRESS THREAD	Yes	SB C	5,707.84	8,104.2	35.0
Yes	138	134	43.80	Cross Over	5 1/2	17.00	P-110	4.892	LT&C	No		5,751.64	8,060.4	35.3
Yes	139	135	45.58	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	5,797.22	8,014.8	35.6
Yes	140	136	45.27	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		5,842.49	7,969.5	35.9
Yes	141	137	45.18	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	5,887.67	7,924.3	36.1
Yes	142	138	45.24	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		5,932.91	7,879.1	36.4
Yes	143	139	44.80	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	5,977.71	7,834.3	36.7
Yes	144	140	45.30	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		6,023.01	7,789.0	37.0
Yes	145	141	43.76	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	6,066.77	7,745.2	37.2
Yes	146	142	45.12	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		6,111.89	7,700.1	37.5
Yes	147	143	41.54	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	6,153.43	7,658.6	37.8
Yes	148	144	44.70	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		6,198.13	7,613.9	38.0
Yes	149	145	45.85	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	6,243.98	7,568.0	38.3
Yes	150	146	46.57	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		6,290.55	7,521.5	38.6
Yes	151	147	44.46	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	6,335.01	7,477.0	38.9
Yes	152	148	45.59	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		6,380.60	7,431.4	39.2
Yes	153	149	45.65	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	6,426.25	7,385.8	39.4
Yes	154	150	46.53	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		6,472.78	7,339.2	39.7

devon

Casing Tally

PRODUCTION, Set Depth: 13,812.0ftKB

District PERMIAN BASIN	County EDDY	Field Name HACKBERRY	Project Group DELAWARE BASIN	State/Province NM
Surface Legal Location SEC22 T19S R31E	API/UWI 3001540627	Latitude (°) 32° 39' 1.785" N	Longitude (°) 103° 50' 55.366" W	Ground Elev. 3,535.90
			KB - GL (ft) 26.20	Orig KB Elev (ft) 3,562.10
				Tubing Head Elevation (ft)

Casing Run Tally

Run?	Run #	Ref #	Len (ft)	Item Des	OD (in)	Wt (lb/ft)	Grade	ID (in)	Top Thread	Centralized?	Ext Jwly	Cum Len (ft)	Top (ftKB)	Vol Disp. Cum (bbl)
Yes	155	151	44.57	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	6,517.35	7,294.7	40.0
Yes	156	152	46.74	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		6,564.09	7,247.9	40.3
Yes	157	153	46.84	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	6,610.93	7,201.1	40.6
Yes	158	154	45.82	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		6,656.75	7,155.3	40.9
Yes	159	155	46.43	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	6,703.18	7,108.8	41.1
Yes	160	156	42.38	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		6,745.56	7,066.4	41.4
Yes	161	157	46.86	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	6,792.42	7,019.6	41.7
Yes	162	158	45.75	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		6,838.17	6,973.8	42.0
Yes	163	159	46.22	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	6,884.39	6,927.6	42.3
Yes	164	160	44.56	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		6,928.95	6,883.1	42.5
Yes	165	161	46.41	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	6,975.36	6,836.6	42.8
Yes	166	162	44.72	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		7,020.08	6,791.9	43.1
Yes	167	163	44.15	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	7,064.23	6,747.8	43.4
Yes	168	164	46.60	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		7,110.83	6,701.2	43.6
Yes	169	165	46.53	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	7,157.36	6,654.6	43.9
Yes	170	166	46.22	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		7,203.58	6,608.4	44.2
Yes	171	167	47.10	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	7,250.68	6,561.3	44.5
Yes	172	168	43.61	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		7,294.29	6,517.7	44.8
Yes	173	169	45.77	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	7,340.06	6,471.9	45.1
Yes	174	170	43.35	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		7,383.41	6,428.6	45.3
Yes	175	171	45.24	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	7,428.65	6,383.4	45.6
Yes	176	172	46.54	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		7,475.19	6,336.8	45.9
Yes	177	173	46.24	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	7,521.43	6,290.6	46.2
Yes	178	174	46.35	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		7,567.78	6,244.2	46.4
Yes	179	175	45.88	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	SB C	7,613.66	6,198.3	46.7
Yes	180	176	45.76	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		7,659.42	6,152.6	47.0
Yes	181	177	45.00	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	7,704.42	6,107.6	47.3
Yes	182	178	44.58	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		7,749.00	6,063.0	47.6
Yes	183	179	44.57	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	7,793.57	6,018.4	47.8
Yes	184	180	45.01	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		7,838.58	5,973.4	48.1
Yes	185	181	45.47	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	7,884.05	5,928.0	48.4
Yes	186	182	46.08	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		7,930.13	5,881.9	48.7
Yes	187	183	46.70	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	7,976.83	5,835.2	49.0
Yes	188	184	45.91	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		8,022.74	5,789.3	49.2
Yes	189	185	45.25	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	8,067.99	5,744.0	49.5
Yes	190	186	46.33	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		8,114.32	5,697.7	49.8
Yes	191	187	46.20	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	8,160.52	5,651.5	50.1
Yes	192	188	46.65	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		8,207.17	5,604.8	50.4



AQUILA 22 FED COM 1H

WEST UNRESTRICTED

Casing Tally

PRODUCTION, Set Depth: 13,812.0ftKB

District PERMIAN BASIN	County EDDY	Field Name HACKBERRY	Project Group DELAWARE BASIN	State/Province NM
Surface Legal Location SEC22 T19S R31E	API/UWI 3001540627	Latitude (") 32° 39' 1.785" N	Longitude (") 103° 50' 55.366" W	Ground Elev... 3,535.90
			KB - GL (ft) 26.20	Orig KB Elev (ft) 3,562.10
				Tubing Head Elevation (ft)

Casing Run Tally

Run?	Run #	Ref #	Len (ft)	Item Des	OD (in)	Wt (lb/ft)	Grade	ID (in)	Top Thread	Centrali zed?	Ext Jwlry	Cum Len (ft)	Top (ftKB)	Vol Disp Cum (bbl)
Yes	193	189	46.37	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	8,253.54	5,558.5	50.7
Yes	194	190	46.50	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		8,300.04	5,512.0	50.9
Yes	195	0	2.35	DV Tool	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	8,302.39	5,509.6	51.0
Yes	196	191	45.29	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		8,347.68	5,464.3	51.2
Yes	197	192	45.93	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	8,393.61	5,418.4	51.5
Yes	198	193	46.75	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		8,440.36	5,371.6	51.8
Yes	199	194	46.70	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	8,487.06	5,324.9	52.1
Yes	200	195	44.84	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		8,531.90	5,280.1	52.4
Yes	201	196	45.68	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	8,577.58	5,234.4	52.6
Yes	202	197	43.99	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		8,621.57	5,190.4	52.9
Yes	203	198	47.00	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	8,668.57	5,143.4	53.2
Yes	204	199	45.30	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		8,713.87	5,098.1	53.5
Yes	205	200	46.38	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	8,760.25	5,051.8	53.8
Yes	206	201	42.88	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		8,803.13	5,008.9	54.0
Yes	207	202	46.03	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	8,849.16	4,962.8	54.3
Yes	208	203	44.99	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		8,894.15	4,917.9	54.6
Yes	209	204	43.74	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	8,937.89	4,874.1	54.9
Yes	210	205	45.59	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		8,983.48	4,828.5	55.1
Yes	211	206	46.68	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	9,030.16	4,781.8	55.4
Yes	212	207	46.60	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		9,076.76	4,735.2	55.7
Yes	213	208	46.25	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	9,123.01	4,689.0	56.0
Yes	214	209	44.45	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		9,167.46	4,644.5	56.3
Yes	215	210	45.46	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	9,212.92	4,599.1	56.5
Yes	216	211	45.79	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		9,258.71	4,553.3	56.8
Yes	217	212	46.02	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	9,304.73	4,507.3	57.1
Yes	218	213	44.15	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		9,348.88	4,463.1	57.4
Yes	219	214	45.15	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	9,394.03	4,418.0	57.7
Yes	220	215	46.74	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		9,440.77	4,371.2	57.9
Yes	221	216	46.28	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	9,487.05	4,325.0	58.2
Yes	222	217	44.28	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		9,531.33	4,280.7	58.5
Yes	223	218	43.94	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	9,575.27	4,236.7	58.8
Yes	224	219	43.11	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		9,618.38	4,193.6	59.0
Yes	225	220	44.58	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	9,662.96	4,149.0	59.3
Yes	226	221	46.45	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		9,709.41	4,102.6	59.6
Yes	227	222	45.57	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	9,754.98	4,057.0	59.9
Yes	228	223	42.43	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		9,797.41	4,014.6	60.1
Yes	229	224	45.25	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	9,842.66	3,969.3	60.4
Yes	230	225	45.69	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		9,888.35	3,923.7	60.7

Casing Tally

PRODUCTION, Set Depth: 13,812.0ftKB

District	County	Field Name		Project Group	State/Province		
PERMIAN BASIN	EDDY	HACKBERRY		DELAWARE BASIN	NM		
Surface Legal Location	API/UWI	Latitude (")	Longitude (")	Ground Elev...	KB - GL (ft)	Orig KB Elev (ft)	Tubing Head Elevation (ft)
SEC22 T19S R31E	3001540627	32° 39' 1.785" N	103° 50' 55.366" W	3,535.90	26.20	3,562.10	

Casing Run Tally

Run?	Run #	Ref #	Len (ft)	Item Des	OD (in)	WT (lb/ft)	Grade	ID (in)	Top Thread	Centralized?	Ext Jwly	Cum Len (ft)	Top (ftKB)	Vol Disp Cum (bbl)
Yes	231	226	46.77	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	9,935.12	3,876.9	61.0
Yes	232	227	45.96	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		9,981.08	3,830.9	61.3
Yes	233	228	45.96	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	10,027.04	3,785.0	61.5
Yes	234	229	46.72	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		10,073.76	3,738.2	61.8
Yes	235	230	40.58	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	10,114.34	3,697.7	62.1
Yes	236	231	46.08	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		10,160.42	3,651.6	62.4
Yes	237	232	42.34	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	10,202.76	3,609.2	62.6
Yes	238	233	44.43	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		10,247.19	3,564.8	62.9
Yes	239	234	46.26	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	10,293.45	3,518.6	63.2
Yes	240	235	46.82	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		10,340.27	3,471.7	63.5
Yes	241	236	46.43	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	10,386.70	3,425.3	63.8
Yes	242	237	46.83	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		10,433.53	3,378.5	64.0
Yes	243	238	44.86	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	10,478.39	3,333.6	64.3
Yes	244	239	39.37	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		10,517.76	3,294.2	64.6
Yes	245	240	38.82	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	10,556.58	3,255.4	64.8
Yes	246	241	45.65	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		10,602.23	3,209.8	65.1
Yes	247	242	45.71	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	10,647.94	3,164.1	65.4
Yes	248	243	46.97	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		10,694.91	3,117.1	65.6
Yes	249	244	43.22	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	10,738.13	3,073.9	65.9
Yes	250	245	38.24	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		10,776.37	3,035.6	66.1
Yes	251	246	45.04	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	10,821.41	2,990.6	66.4
Yes	252	247	36.26	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		10,857.67	2,954.3	66.6
Yes	253	248	39.50	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	10,897.17	2,914.8	66.9
Yes	254	249	43.50	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		10,940.67	2,871.3	67.2
Yes	255	250	44.93	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	10,985.60	2,826.4	67.4
Yes	256	251	36.91	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,022.51	2,789.5	67.7
Yes	257	252	44.42	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	11,066.93	2,745.1	67.9
Yes	258	253	37.07	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,104.00	2,708.0	68.2
Yes	259	254	46.45	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	Yes	BS C	11,150.45	2,661.6	68.4
Yes	260	255	45.34	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,195.79	2,616.2	68.7
Yes	261	256	45.03	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,240.82	2,571.2	69.0
Yes	262	257	46.03	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,286.85	2,525.2	69.3
Yes	263	258	46.39	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,333.24	2,478.8	69.6
Yes	264	259	43.69	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,376.93	2,435.1	69.8
Yes	265	260	45.83	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,422.76	2,389.2	70.1
Yes	266	261	46.08	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,468.84	2,343.2	70.4
Yes	267	262	45.95	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,514.79	2,297.2	70.7
Yes	268	263	45.85	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,560.64	2,251.4	71.0
Yes	269	264	46.37	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,607.01	2,205.0	71.2
Yes	270	265	45.95	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,652.96	2,159.0	71.5
Yes	271	266	46.47	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,699.43	2,112.6	71.8
Yes	272	267	44.55	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,743.98	2,068.0	72.1



AQUILA 22 FED COM 1H

WEST UNRESTRICTED

Casing Tally

PRODUCTION, Set Depth: 13,812.0ftKB

District PERMIAN BASIN	County EDDY	Field Name HACKBERRY	Project Group DELAWARE BASIN	State/Province NM
Surface Legal Location SEC22 T19S R31E	API/UWI 3001540627	Latitude (°) 32° 39' 1.785" N	Longitude (°) 103° 50' 55.366" W	Ground Elev... 3,535.90
			KB - GL (ft) 26.20	Orig KB Elev (ft) 3,562.10
				Tubing Head Elevation (ft)

Casing Run Tally

Run?	Run #	Ref #	Len (ft)	Item Des	OD (in)	Wt (lb/ft)	Grade	ID (in)	Top Thread	Centralized?	Ext Jwry	Cum Len (ft)	Top (ftKB)	Vol Disp Cum (bbl)
Yes	273	268	45.97	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,789.95	2,022.1	72.4
Yes	274	269	46.91	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,836.86	1,975.1	72.7
Yes	275	270	46.02	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,882.88	1,929.1	72.9
Yes	276	271	44.54	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,927.42	1,884.6	73.2
Yes	277	272	46.40	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		11,973.82	1,838.2	73.5
Yes	278	273	46.57	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,020.39	1,791.6	73.8
Yes	279	274	46.02	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,066.41	1,745.6	74.1
Yes	280	275	45.73	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,112.14	1,699.9	74.3
Yes	281	276	39.17	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,151.31	1,660.7	74.6
Yes	282	277	46.43	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,197.74	1,614.3	74.9
Yes	283	278	46.88	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,244.62	1,567.4	75.2
Yes	284	279	44.09	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,288.71	1,523.3	75.4
Yes	285	280	46.41	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,335.12	1,476.9	75.7
Yes	286	281	45.62	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,380.74	1,431.3	76.0
Yes	287	282	46.05	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,426.79	1,385.2	76.3
Yes	288	283	44.58	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,471.37	1,340.6	76.5
Yes	289	284	45.22	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,516.59	1,295.4	76.8
Yes	290	285	45.61	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,562.20	1,249.8	77.1
Yes	291	286	45.30	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,607.50	1,204.5	77.4
Yes	292	287	45.37	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,652.87	1,159.1	77.7
Yes	293	288	44.21	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,697.08	1,114.9	77.9
Yes	294	289	46.43	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,743.51	1,068.5	78.2
Yes	295	290	44.95	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,788.46	1,023.5	78.5
Yes	296	291	46.84	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,835.30	976.7	78.8
Yes	297	292	46.50	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,881.80	930.2	79.1
Yes	298	293	46.23	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,928.03	884.0	79.3
Yes	299	294	43.98	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		12,972.01	840.0	79.6
Yes	300	295	45.41	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		13,017.42	794.6	79.9
Yes	301	296	42.60	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		13,060.02	752.0	80.2
Yes	302	297	45.50	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		13,105.52	706.5	80.4
Yes	303	298	45.42	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		13,150.94	661.1	80.7
Yes	304	299	45.21	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		13,196.15	615.9	81.0
Yes	305	300	42.23	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		13,238.38	573.6	81.3
Yes	306	301	44.09	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		13,282.47	529.5	81.5
Yes	307	302	45.04	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		13,327.51	484.5	81.8
Yes	308	303	41.16	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		13,368.67	443.3	82.1
Yes	309	304	46.40	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		13,415.07	396.9	82.3
Yes	310	305	45.48	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		13,460.55	351.5	82.6
Yes	311	306	42.00	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		13,502.55	309.5	82.9
Yes	312	307	43.90	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		13,546.45	265.6	83.1
Yes	313	308	45.27	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		13,591.72	220.3	83.4
Yes	314	309	44.74	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		13,636.46	175.5	83.7
Yes	315	310	45.94	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		13,682.40	129.6	84.0
Yes	316	311	43.85	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		13,726.25	85.8	84.2
Yes	317	312	46.00	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		13,772.25	39.8	84.5
Yes	318	313	45.57	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No		13,817.82	-5.8	84.8
No		319	45.34	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No				
No		325	45.34	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No				
No		324	21.64	Marker Joint	5 1/2	17.00	P-110	4.892	LT&C	No				
No		327	41.61	Cross Over	5 1/2	17.00	P-110	4.892	LT&C	Yes				
No		326	38.58	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No				
No		318	42.36	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No				
No		327	45.87	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No				
No		317	45.68	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No				
No		328	46.01	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No				



AQUILA 22 FED COM 1H

WEST UNRESTRICTED

Casing Tally

PRODUCTION, Set Depth: 13,812.0ftKB

District	County	Field Name		Project Group	State/Province		
PERMIAN BASIN	EDDY	HACKBERRY		DELAWARE BASIN	NM		
Surface Legal Location	API/UWI	Latitude (°)	Longitude (°)	Ground Elev...	KB - GL (ft)	Orig KB Elev (ft)	Tubing Head Elevation (ft)
SEC22 T19S R31E	3001540627	32° 39' 1.785" N	103° 50' 55.366" W	3,535.90	26.20	3,562.10	

Casing Run Tally

Run?	Run #	Ref #	Len (ft)	Item Des	OD (in)	Wt (lb/ft)	Grade	ID (in)	Top Thread	Centrali zed?	Ext Jwlry	Cum Len (ft)	Top (ftKB)	Vol Disp Cum (bbl)
No		316	41.14	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No				
No		315	44.70	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No				
No		314	44.15	Casing Joints	5 1/2	17.00	P-110	4.892	LT&C	No				