

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONFIDENTIAL

Oil Cons.
N.M. DIST. 2
1301 W. Grand Avenue
Artesia, NM 88210
FOR APPROVAL
DATE: 10/02/2013
EXPIRES: November 30, 2000
Lease Serial No.
NMT 69

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry Other		6. If Indian, Allottee or Tribe Name N/A																																																			
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resv., Other _____		7. Unit or CA Agreement Name and no. N/A																																																			
2. Name of Operator Devon Energy Production Company, L.P. / Wally Frank, Senior Ops Engr, 405-552-4595		8. Lease Name and Well No. Avalon 32F Federal 2																																																			
3. Address 20 N. Broadway, Suite 1500, OKC, OK 73102		9. API Well No. 30-015-31588 31558-S1																																																			
3a. Phone No. (Include area code) (405)235-3611		10. Field and Pool, or Exploratory Avalon (Strawn)																																																			
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At Surface 1780' FNL & 1650' FWL, Unit F, Section 32-T20S-R27E, Eddy Cnty, NM At top prod. interval reported below (same) At total depth (same)		11. Sec., T., R., M., on Block and Survey or Area 32-T20S-R27E																																																			
14. Date Spudded 02/05/2001		15. Date T.D. Reached 03/07/2001																																																			
16. Date Completed ☐ D & A ☒ Ready to Prod. 05-09-01		17. Elevations (DF, RKB, RT, GL)* GL 3197, DF 3213', KB 3214'																																																			
18. Total Depth: MD 10,800' TVD		19. Plug Back T.D.: MD 10,415' TVD																																																			
20. Depth Bridge Plug Set: MD 10,450' CIBP TVD		21. Type of Electric & Other Mechanical Logs Run (Submit copy of each) Platform Express High Resolution Laterlog Array Micro-CFL/NGT, Three Detector Litho-Density/Compensated Neutron/NGT, Cement Bond logs																																																			
22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit analysis) Directional Survey? ☒ No ☐ Yes (Submit copy)		23. Casing and Liner Record (Report all strings set in well)																																																			
<table border="1"><thead><tr><th>Hole Size</th><th>Size/Grade</th><th>Wt. (#/ft.)</th><th>Top (MD)</th><th>Bottom (MD)</th><th>Stage Cementer Depth</th><th>No. of Sk. & Type of Cement</th><th>Slurry Vol. (BBL)</th><th>Cement Top*</th><th>Amount Pulled</th></tr></thead><tbody><tr><td>17 1/2"</td><td>13 3/8" H40</td><td>48#</td><td>surf</td><td>454'</td><td></td><td>100sx CI H+ 250sx Poz + 312 sx C1 C</td><td></td><td>surf, calc</td><td></td></tr><tr><td>12 1/4"</td><td>8 5/8" J-55</td><td>32#</td><td>surf</td><td>1700'</td><td></td><td>125sx CI H+ 338sx Poz+ 700sx C1 C</td><td></td><td>surf, calc</td><td></td></tr><tr><td>7 7/8"</td><td>5 1/2" J-55</td><td>15.5#</td><td>surf</td><td>10,800'</td><td></td><td>775 sx Poz + 100 sx CI H</td><td></td><td>6100', CBL</td><td></td></tr><tr><td></td><td>L-80</td><td>17#</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table>				Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled	17 1/2"	13 3/8" H40	48#	surf	454'		100sx CI H+ 250sx Poz + 312 sx C1 C		surf, calc		12 1/4"	8 5/8" J-55	32#	surf	1700'		125sx CI H+ 338sx Poz+ 700sx C1 C		surf, calc		7 7/8"	5 1/2" J-55	15.5#	surf	10,800'		775 sx Poz + 100 sx CI H		6100', CBL			L-80	17#							
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Choice Size 7/64" SI 2042																																																					
24 Hr. Rate → 0																																																					
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RECEIVED
OCD - ARTESIA

ACCEPTED FOR RECORD

ALEXIS C. SWOBODA
PETROLEUM ENGINEER

(See Instructions and spaces for additional data on reverse side)

per Claude Graham / Devco

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	MCF	Water BBL	Oil Gravity	Gas Gravity	Production Method
Choke Size	Tbg. Press.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	
SI	Flowg.		←						

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	MCF	Water BBL	Oil Gravity	Gas Gravity	Production Method
Choke Size	Tbg. Press.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	
SI	Flowg.		←						

29. Disposition of Gas (Solid, used for fuel, vented, etc.)

WOP

30. Summary of Porous Zones (Include Aquifers):

Show all important zones or porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Meas. Depth
				Delaware	2160'
				Bone Spring Lime	4023'
				3rd Bone Spring	7614'
				Wolfcamp	8110'
				Cisco	8814'
				Canyon Lime	9005'
				Strawn	9474'
				Atoka	9953'
				Middle Morrow	10,332'
				Lower Morrow	10,591'
				Barnett	10,727'

32. Additional remarks (include plugging procedure):

33. Circle enclosed attachments:

- ① Electrical/Mechanical Logs (1 full set req'd.)
2. Geological Report
3. DST Report
4. Directional Survey
5. Sundry Notice for plugging and cement verification
6. Core Analysis
⑦ Other = deviation survey report, C102, C122

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) Candace R. Graham Title Engineering Tech.

Signature Candace R. Graham Date 09/12/2001

Title 18 U.S.C. Section 101 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 and false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Artesia, NM 87410

DISTRICT IV
P.O. Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015- 31588 31558	Pool Code	Pool Name AVALON (STRAWN)
Property Code	Property Name AVALON "32-F" FEDERAL	Well Number 2
GRID No. 6137	Operator Name DEVON ENERGY PRODUCTION CO., L.P.	Elevation 3197

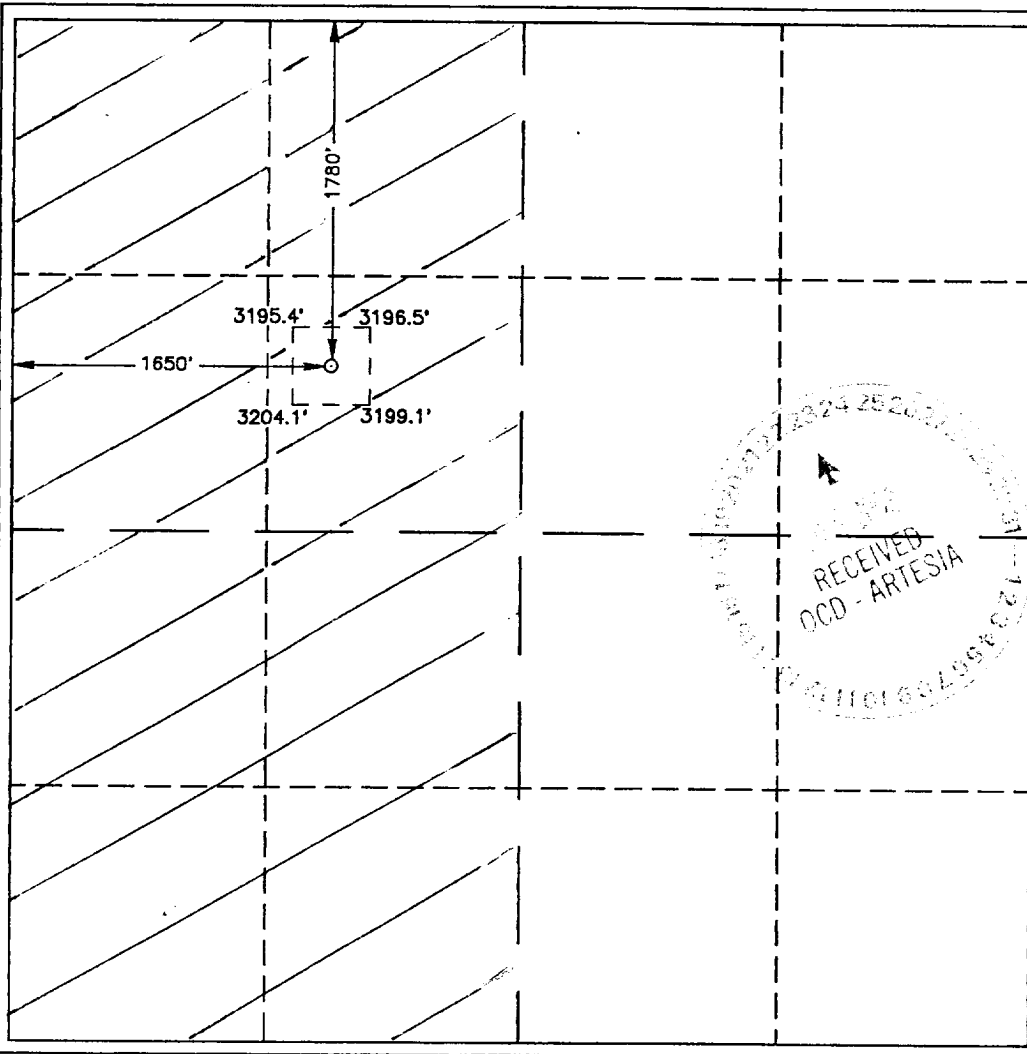
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	32	20 S	27 E		1780	NORTH	1650	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. <u>Candace R. Graham</u> Signature Candace R. Graham Printed Name Engineering Tech. Title September 11, 2001 Date SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. AUGUST 28, 2000 Date Surveyed Signature & Seal of Professional Surveyor <u>Ronald J. Eidson</u> 9/14/00 W.O. Num 00-11-1026 Certificate No. RONALD J. EIDSON, 3239 GARY G. EIDSON, 12841 MACON McDONALD, 12185
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CONFIDENTIAL

PATTERSON DRILLING COMPANY LP
A LIMITED PARTNERSHIP

410 North Loraine Street • Midland, Texas 79701
(915) 682-9401 • Fax (915) 682-1565

March 20, 2001

Devon Energy Production Company LP
20 N. Broadway, Ste. 1500
Oklahoma City, OK 73102-8260

Re: Deviation Report
Avalon 32 Fed Com #2
Sec. 32, T-20-N, R-27-E
Eddy Cnty, NM

API 30-150-~~31588~~ 31558

Gentlemen:

The following is a deviation survey on the above-referenced well located in Eddy County, New Mexico.

141' - 0.25	2827' - 2.00	5239' - 2.50	8519' - 0.75
232' - 0.50	3144' - 1.75	5430' - 1.75	8901' - 1.50
323' - 0.50	3459' - 1.75	5621' - 1.75	8997' - 1.50
421' - 0.75	3744' - 1.75	5810' - 1.50	9156' - 1.25
670' - 0.75	4061' - 1.75	6127' - 1.25	9343' - 1.50
1112' - 1.50	4347' - 2.75	6413' - 1.25	9564' - 1.50
1365' - 2.00	4635' - 3.00	6703' - 1.25	9853' - 1.00
1681' - 2.00	4793' - 3.00	7021' - 1.25	10140' - 1.75
1973' - 2.50	4984' - 3.25	7307' - 0.75	10454' - 2.00
2258' - 2.25	5048' - 2.75	7624' - 0.50	10751' - 2.75
2542' - 2.00	5143' - 2.25	8038' - 0.75	

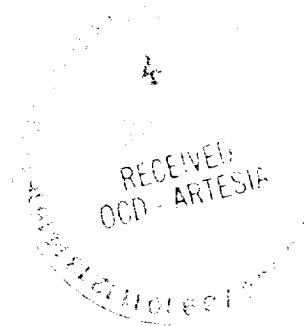
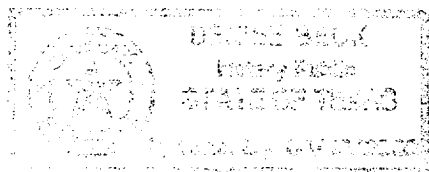
Sincerely,

Treva Forrester

STATE OF TEXAS)
)
COUNTY OF MIDLAND)

The foregoing was acknowledged before me this 20th day of March, 2001 by Treva Forrester.

MY COMMISSION EXPIRES:

NOTARY PUBLIC

Submit in duplicate to
appropriate district office.
See Rule 401 & Rule 1122

CONFIDENTIAL
State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-122
Revised October, 1999

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator DEVON ENERGY					Lease or Unit Name AVALON 32-F FEDERAL					
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 8/2/01		Well No. 2			
Completion Date 5-9-2001		Total Depth 10,800'		Plug Back TD 10,415'		Elevation GL 3197'		Unit Ltr - Sec - TWP - Rge F 32-20S-27E		
Csg. Size	Wt.	d	Set At	Perforations: From: 9431' To: 9496'			County EDDY, NM			
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 9345'	Perforations: From: To:			Pool Avalon			
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 9345'		Formation Strawn				
Producing Thru TUBBING		Reservoir Temp. °F 178.1		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		Connection AIR		
L 10414	H 10414	Gg 0.784	%CO ₂ 4.826	%N ₂ 2.54	%H ₂ S N/A	Prover N/A	Meter Run 6.065	Taps FLG		
FLOW DATA					TUBING DATA			CASING DATA		
No.	Prover Line Size	Orifice x Size	Press p.s.i.g.	Diff. h _w	Temp. °F	Press p.s.i.g.	Temp. °F	Press p.s.i.g.	Temp. °F	
SI						2318	N/A	PKR	N/A	
1	6.065	X .750	470	6	96	2296			1 HR	
2	6.065	X .750	580	18	92	2278			1 HR	
3	6.065	X .750	540	40	92	2243			1 HR	
4	6.065	X .750	560	85	92	2042			1 HR	
5										
RATE OF FLOW CALCULATIONS										
No.	COEFFICIENT (24 Hour)		$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress Factor F _{pv}	Rate of Flow Q, Mcfd		
1	2.625		59.1	483.2	0.9671	1.156	1.054	182		
2	2.625		103.3	593.2	0.9706	1.156	1.055	320		
3	2.625		148.7	553.2	0.9706	1.156	1.055	462		
4	2.625		220.7	573.2	0.9706	1.156	1.055	685		
5										
No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio			N/A Mcf/bbl.		
1	0.81	556	1.42	0.9	A.P. I. Gravity of Liquid Hydrocarbons			N/A Deg.		
2	0.81	552	1.41	0.898	Specific Gravity Separator Gas			0.784 XXXXXXXX		
3	0.81	552	1.41	0.898	Specific Gravity Flowing Fluid			XXXXXX		
4	0.81	552	1.41	0.898	Critical Pressure		680 P.S.I.A.	P.S.I.A.		
5					Critical Temperature		390 R	R		
P _c 2331.2		P _{c2} 5434.5								
No.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{4.544}{\quad}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{2.201}{\quad}$					
1	5332.4	2309.4	5333.5	101						
2	5249.6	2291.9	5252.8	181.6						
3	5090.4	2257.7	5097.2	3373						
4	4223.8	2058.8	4238.6	1195.9						
5										
Absolute Open Flow					1.507 Mcfd @ 15.025		Angle of Slope (°)		62.48	Slope n: 0.521
Remarks: * NO LIQUID MADE DURING TEST.										
Approved By Division:			Conducted By: PRO WELL TESTING		Calculated By: MERV BUECKER			Checked By: BM		

CONFIDENTIAL

DEVON ENERGY PRODUCTION COMPANY, L.P.
~~DEVON SFS OPERATING INC.~~
AVALON 32-F #2

