

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**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 page 2**

1. Type of Well ☐ Oil Well ☐ Gas Well ☒ Other: COAL BED METHANE		5. Lease Serial No. NMSF079011
2. Name of Operator SOUTHLAND ROYALTY COMPANY LLC		6. If Indian, Allottee or Tribe Name
3a. Address 400 W 7TH STREET FORT WORTH, TX 76102		7. If Unit or CA/Agreement, Name and/or No. NMNM119482
3b. Phone No. (include area code) Ph: 817.334.7842		8. Well Name and No. SAN JUAN 32-5 UNIT COM 114H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 24 T32N R6W SWNW 1345FNL 225FWL 36.969444 N Lat, 107.416667 W Lon		9. API Well No. 30-039-29790-01-S1
		10. Field and Pool or Exploratory Area BASIN FRUITLAND COAL
		11. County or Parish, State RIO ARriba COUNTY, NM

12. CHECK THE 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	☐ Hydraulic Fracturing	☐ 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 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 must 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 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

UPDATE TO EC375749:

A COMPOSITE BP WILL BE SET @ APPROX. 4195' IN THE MAINBORE ISOLATING LATERAL #2 AND TO SERVE AS A BASE FOR THE WHIPSTOCK ASSEMBLY.

A WINDOW WILL BE MILLED IN THE EXISTING 7" CSG FROM 4179'-4188'MD.
THE LATERAL WILL BE DRILLED TO 9148'MD, 2956'TVD.

OIL CONS. DIV DIST. 3

JUL 25 2017

Notify NMOCD 24 hrs
prior to beginning
operations

14. I hereby certify that the foregoing is true and correct. Electronic Submission #381349 verified by the BLM Well Information System For SOUTHLAND ROYALTY COMPANY LLC, sent to the Farmington Committed to AFMSS for processing by JACK SAVAGE on 07/19/2017 (17JWS0147SE)	
Name (Printed/Typed) ROBBIE A GRIGG	Title SUPVR REGULATORY REPORTING
Signature (Electronic Submission)	Date 07/14/2017

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By JACK SAVAGE	Title PETROLEUM ENGINEER	Date 07/19/2017
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 Farmington

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.

(Instructions on page 2)

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

NMOCD

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3482

State of New Mexico
Energy, Minerals & Natural Resources Department

AUG 02 2017

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-29790	² Pool Code 71629	³ Pool Name Basin Fruitland Coal
⁴ Property Code 35674	⁵ Property Name SAN JUAN 32-5 UNIT COM	⁶ Well Number 114
⁷ OGRID No. 282327	⁸ Operator Name SOUTHLAND ROYALTY CO., LLC	⁹ Elevation 6475'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	24	32N	6W		1359'	NORTH	205'	WEST	RIO ARRIBA

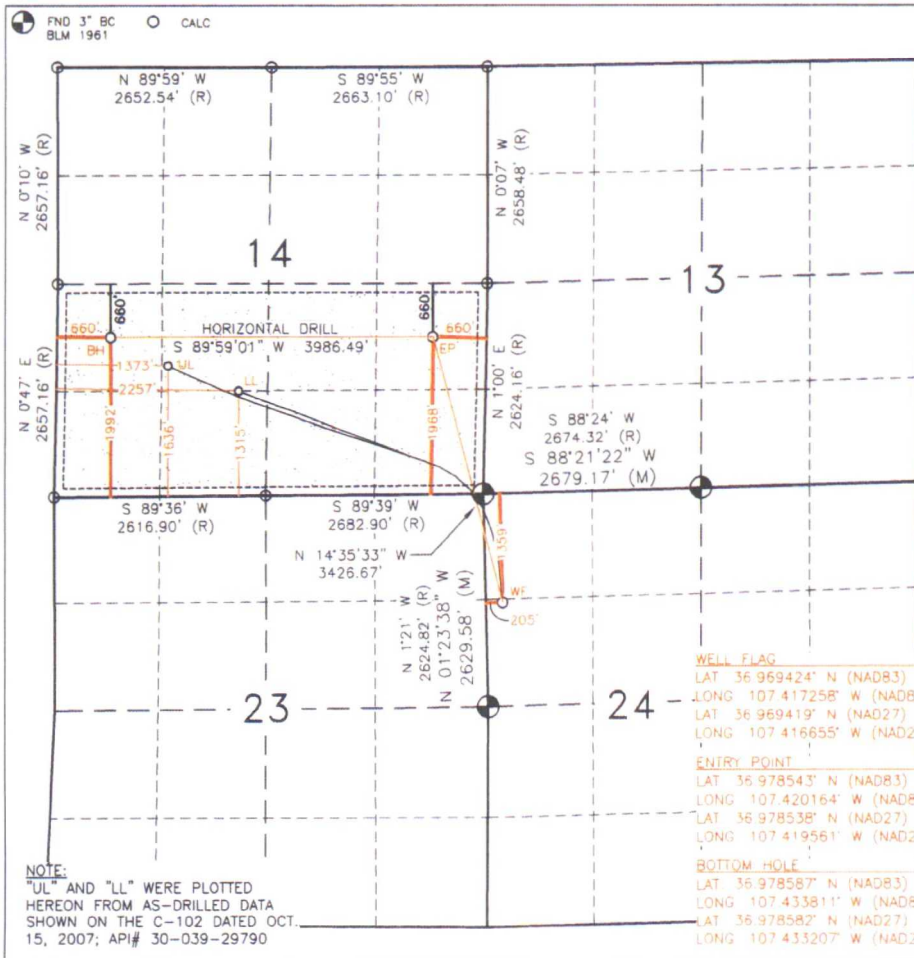
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
BH: L UL & LL: K	14	32N	6W		BH: 1992' LL: 1315' UL: 1636'	SOUTH	BH: 660' LL: 2257' UL: 1373'	WEST	SAN JUAN

¹² Dedicated Acres 320 ACRES - S/2	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: *Robbie A. Grigg* Date: 8/1/2017
Printed Name: Robbie A Grigg
E-mail Address: rgrigg@mspartners.com

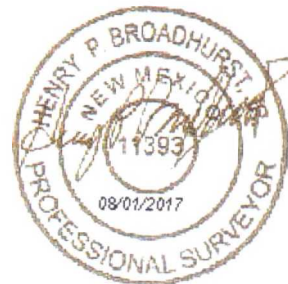
SURVEYOR CERTIFICATION

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.

APRIL 14, 2017

Date of Survey

Signature and Seal of Professional Surveyor:



Certificate Number

11393

Southland Royalty

Rio Arriba County

Fruitland Coal Prospect

San Juan 32-5 Unit COM #114

ST 3

Plan: Design #7

Standard Planning Report

12 July, 2017



Payzone Directional Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well San Juan 32-5 Unit COM #114
Company:	Southland Royalty	TVD Reference:	San Juan 32-5 Unit COM #114 @ 6487.0usft (KB)
Project:	Rio Arriba County	MD Reference:	San Juan 32-5 Unit COM #114 @ 6487.0usft (KB)
Site:	Fruitland Coal Prospect	North Reference:	True
Well:	San Juan 32-5 Unit COM #114	Survey Calculation Method:	Minimum Curvature
Wellbore:	ST 3		
Design:	Design #7		

Project	Rio Arriba County		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		

Site	Fruitland Coal Prospect		
Site Position:		Northing:	2,172,400.40 usft
From:	Map	Easting:	621,736.70 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"
		Latitude:	36° 58' 9.887 N
		Longitude:	107° 24' 59.819 W
		Grid Convergence:	0.25 °

Well	San Juan 32-5 Unit COM #114, SHL: X= 621736.7 Y= 2172400.4		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	6,487.0 usft
		Latitude:	36° 58' 9.887 N
		Longitude:	107° 24' 59.819 W
		Ground Level:	6,472.0 usft

Wellbore	ST 3		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	6/27/2017	9.14
			Dip Angle (°)
			63.59
			Field Strength (nT)
			50,205

Design	Design #7		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			4,179.3
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction (°)
			304.14

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
4,179.3	62.13	299.98	2,966.8	2,008.1	-788.0	0.00	0.00	0.00	0.00	
4,576.4	90.50	9.07	3,072.1	2,336.0	-927.5	18.09	7.14	17.40	79.42	
4,583.1	90.50	9.07	3,072.0	2,342.7	-926.5	0.00	0.00	0.00	0.00	ST 3 LPT
5,968.0	91.50	270.32	3,039.3	3,272.7	-1,715.0	7.13	0.07	-7.13	-88.40	
9,148.4	91.50	270.32	2,956.0	3,290.4	-4,894.2	0.00	0.00	0.00	0.00	ST3 BHL 2

Payzone Directional Planning Report



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Project:	Rio Arriba County	MD Reference:	San Juan 32-5 Unit COM #114 @ 6487.0usft (KB)
Site:	Fruitland Coal Prospect	North Reference:	True
Well:	San Juan 32-5 Unit COM #114	Survey Calculation Method:	Minimum Curvature
Wellbore:	ST 3		
Design:	Design #7		

Planned 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)
4,179.3	62.13	299.98	2,966.8	2,008.1	-788.0	1,779.2	0.00	0.00	0.00
Start DLS 18.09 TFO 79.42 - ST3 LP 2									
4,179.7	62.14	300.07	2,967.0	2,008.3	-788.3	1,779.6	18.09	3.33	20.12
FRUITLAND COAL									
4,200.0	62.88	304.12	2,976.4	2,017.8	-803.6	1,797.5	18.09	3.63	19.98
4,225.0	63.94	309.03	2,987.6	2,031.2	-821.5	1,819.9	18.09	4.26	19.67
4,250.0	65.17	313.86	2,998.3	2,046.1	-838.4	1,842.3	18.09	4.91	19.29
4,275.0	66.55	318.58	3,008.5	2,062.6	-854.2	1,864.6	18.09	5.52	18.89
4,300.0	68.07	323.20	3,018.2	2,080.5	-868.7	1,886.6	18.09	6.07	18.48
4,325.0	69.71	327.72	3,027.2	2,099.7	-881.9	1,908.3	18.09	6.58	18.07
4,350.0	71.47	332.14	3,035.5	2,120.1	-893.8	1,929.6	18.09	7.03	17.68
4,375.0	73.33	336.46	3,043.1	2,141.5	-904.1	1,950.2	18.09	7.43	17.31
4,400.0	75.27	340.71	3,049.8	2,163.9	-912.9	1,970.0	18.09	7.78	16.97
4,425.0	77.29	344.87	3,055.8	2,187.1	-920.0	1,989.0	18.09	8.09	16.66
4,450.0	79.38	348.97	3,060.8	2,211.0	-925.6	2,006.9	18.09	8.34	16.40
4,475.0	81.52	353.01	3,065.0	2,235.3	-929.4	2,023.8	18.09	8.55	16.17
4,475.3	81.52	353.01	3,065.0	2,235.6	-929.5	2,023.9	0.00	0.00	0.00
FRUITLAND HZ COAL TOP									
4,500.0	83.70	357.01	3,068.2	2,260.0	-931.6	2,039.4	18.29	8.81	16.16
4,525.0	85.91	0.97	3,070.4	2,284.9	-932.0	2,053.7	18.09	8.84	15.86
4,548.0	87.95	4.60	3,071.7	2,307.8	-930.9	2,065.7	18.09	8.91	15.77
ST 3 LP - ST3 LP									
4,549.9	88.13	4.91	3,071.7	2,309.8	-930.7	2,066.6	18.09	8.94	15.74
Plan @ 3038.1 (San Juan 32-5 Unit COM #114 ST 3 De									
4,550.0	88.14	4.92	3,071.7	2,309.8	-930.7	2,066.7	18.09	8.94	15.74
4,576.4	90.50	9.07	3,072.1	2,336.0	-927.5	2,078.7	18.09	8.95	15.73
Start 6.7 hold at 4509.4 MD									
4,583.1	90.50	9.07	3,072.0	2,342.7	-926.5	2,081.6	0.00	0.00	0.00
Start DLS 7.13 TFO -88.40 - ST 3 LPT									
4,600.0	90.54	7.87	3,071.8	2,359.3	-924.0	2,088.9	7.13	0.20	-7.13
4,650.0	90.63	4.31	3,071.3	2,409.1	-918.7	2,112.4	7.13	0.19	-7.13
4,700.0	90.73	0.75	3,070.7	2,459.0	-916.5	2,138.6	7.13	0.19	-7.13
4,750.0	90.82	357.18	3,070.1	2,509.0	-917.4	2,167.4	7.13	0.18	-7.13
4,800.0	90.91	353.62	3,069.3	2,558.8	-921.4	2,198.7	7.13	0.18	-7.13
4,850.0	90.99	350.05	3,068.5	2,608.3	-928.5	2,232.3	7.13	0.17	-7.13
4,900.0	91.08	346.49	3,067.6	2,657.2	-938.6	2,268.2	7.13	0.16	-7.13
4,950.0	91.15	342.92	3,066.6	2,705.4	-951.8	2,306.2	7.13	0.16	-7.13
5,000.0	91.23	339.36	3,065.6	2,752.7	-968.0	2,346.1	7.13	0.15	-7.13
5,030.7	91.27	337.17	3,064.9	2,781.2	-979.3	2,371.5	7.13	0.14	-7.13
Plan @ 3002.6 (San Juan 32-5 Unit COM #114 ST 3 De									
5,050.0	91.29	335.79	3,064.5	2,798.9	-987.1	2,387.8	7.13	0.13	-7.13
5,100.0	91.36	332.23	3,063.3	2,843.8	-1,009.0	2,431.1	7.13	0.13	-7.13
5,150.0	91.42	328.66	3,062.1	2,887.3	-1,033.6	2,475.9	7.13	0.12	-7.13
5,200.0	91.47	325.10	3,060.8	2,929.2	-1,060.9	2,522.0	7.13	0.11	-7.13
5,250.0	91.52	321.53	3,059.5	2,969.3	-1,090.8	2,569.2	7.13	0.09	-7.13
5,300.0	91.56	317.96	3,058.2	3,007.4	-1,123.1	2,617.4	7.13	0.08	-7.13
5,350.0	91.59	314.40	3,056.8	3,043.5	-1,157.7	2,666.2	7.13	0.07	-7.13
5,400.0	91.62	310.83	3,055.4	3,077.3	-1,194.4	2,715.7	7.13	0.06	-7.13
5,450.0	91.64	307.27	3,054.0	3,108.8	-1,233.2	2,765.4	7.13	0.05	-7.13
5,500.0	91.66	303.70	3,052.6	3,137.8	-1,273.9	2,815.4	7.13	0.03	-7.13
5,550.0	91.67	300.13	3,051.1	3,164.2	-1,316.4	2,865.3	7.13	0.02	-7.13

Payzone Directional Planning Report



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Company:	Southland Royalty	TVD Reference:	San Juan 32-5 Unit COM #114 @ 6487.0usft (KB)
Project:	Rio Arriba County	MD Reference:	San Juan 32-5 Unit COM #114 @ 6487.0usft (KB)
Site:	Fruitland Coal Prospect	North Reference:	True
Well:	San Juan 32-5 Unit COM #114	Survey Calculation Method:	Minimum Curvature
Wellbore:	ST 3		
Design:	Design #7		

Planned 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)
5,600.0	91.67	296.57	3,049.6	3,187.9	-1,360.3	2,915.0	7.13	0.01	-7.13
5,650.0	91.67	293.00	3,048.2	3,208.9	-1,405.7	2,964.4	7.13	-0.01	-7.13
5,700.0	91.66	289.43	3,046.7	3,226.9	-1,452.3	3,013.1	7.13	-0.02	-7.13
5,750.0	91.64	285.87	3,045.3	3,242.1	-1,499.9	3,061.0	7.13	-0.03	-7.13
5,800.0	91.62	282.30	3,043.9	3,254.3	-1,548.4	3,107.9	7.13	-0.04	-7.13
5,850.0	91.59	278.73	3,042.5	3,263.4	-1,597.5	3,153.7	7.13	-0.06	-7.13
5,900.0	91.56	275.17	3,041.1	3,269.4	-1,647.1	3,198.1	7.13	-0.07	-7.13
5,950.0	91.52	271.60	3,039.8	3,272.4	-1,697.0	3,241.1	7.13	-0.08	-7.13
5,968.0	91.50	270.32	3,039.3	3,272.7	-1,715.0	3,256.1	7.13	-0.09	-7.13
Start 3180.4 hold at 5901.0 MD									
6,000.0	91.50	270.32	3,038.4	3,272.9	-1,747.0	3,282.7	0.00	0.00	0.00
6,100.0	91.50	270.32	3,035.8	3,273.4	-1,846.9	3,365.8	0.00	0.00	0.00
6,200.0	91.50	270.32	3,033.2	3,274.0	-1,946.9	3,448.8	0.00	0.00	0.00
6,300.0	91.50	270.32	3,030.6	3,274.5	-2,046.9	3,531.9	0.00	0.00	0.00
6,400.0	91.50	270.32	3,028.0	3,275.1	-2,146.8	3,614.9	0.00	0.00	0.00
6,500.0	91.50	270.32	3,025.3	3,275.6	-2,246.8	3,698.0	0.00	0.00	0.00
6,600.0	91.50	270.32	3,022.7	3,276.2	-2,346.8	3,781.0	0.00	0.00	0.00
6,700.0	91.50	270.32	3,020.1	3,276.8	-2,446.7	3,864.1	0.00	0.00	0.00
6,800.0	91.50	270.32	3,017.5	3,277.3	-2,546.7	3,947.1	0.00	0.00	0.00
6,900.0	91.50	270.32	3,014.9	3,277.9	-2,646.7	4,030.2	0.00	0.00	0.00
7,000.0	91.50	270.32	3,012.3	3,278.4	-2,746.6	4,113.2	0.00	0.00	0.00
7,100.0	91.50	270.32	3,009.6	3,279.0	-2,846.6	4,196.3	0.00	0.00	0.00
7,200.0	91.50	270.32	3,007.0	3,279.5	-2,946.5	4,279.3	0.00	0.00	0.00
7,300.0	91.50	270.32	3,004.4	3,280.1	-3,046.5	4,362.4	0.00	0.00	0.00
7,400.0	91.50	270.32	3,001.8	3,280.7	-3,146.5	4,445.4	0.00	0.00	0.00
7,500.0	91.50	270.32	2,999.2	3,281.2	-3,246.4	4,528.5	0.00	0.00	0.00
7,600.0	91.50	270.32	2,996.5	3,281.8	-3,346.4	4,611.5	0.00	0.00	0.00
7,700.0	91.50	270.32	2,993.9	3,282.3	-3,446.4	4,694.6	0.00	0.00	0.00
7,800.0	91.50	270.32	2,991.3	3,282.9	-3,546.3	4,777.6	0.00	0.00	0.00
7,900.0	91.50	270.32	2,988.7	3,283.4	-3,646.3	4,860.7	0.00	0.00	0.00
8,000.0	91.50	270.32	2,986.1	3,284.0	-3,746.3	4,943.7	0.00	0.00	0.00
8,100.0	91.50	270.32	2,983.5	3,284.6	-3,846.2	5,026.8	0.00	0.00	0.00
8,200.0	91.50	270.32	2,980.8	3,285.1	-3,946.2	5,109.8	0.00	0.00	0.00
8,300.0	91.50	270.32	2,978.2	3,285.7	-4,046.2	5,192.9	0.00	0.00	0.00
8,400.0	91.50	270.32	2,975.6	3,286.2	-4,146.1	5,275.9	0.00	0.00	0.00
8,500.0	91.50	270.32	2,973.0	3,286.8	-4,246.1	5,359.0	0.00	0.00	0.00
8,600.0	91.50	270.32	2,970.4	3,287.3	-4,346.0	5,442.0	0.00	0.00	0.00
8,700.0	91.50	270.32	2,967.7	3,287.9	-4,446.0	5,525.1	0.00	0.00	0.00
8,800.0	91.50	270.32	2,965.1	3,288.5	-4,546.0	5,608.1	0.00	0.00	0.00
8,900.0	91.50	270.32	2,962.5	3,289.0	-4,645.9	5,691.2	0.00	0.00	0.00
9,000.0	91.50	270.32	2,959.9	3,289.6	-4,745.9	5,774.2	0.00	0.00	0.00
9,100.0	91.50	270.32	2,957.3	3,290.1	-4,845.9	5,857.2	0.00	0.00	0.00
9,146.8	91.50	270.32	2,956.0	3,290.4	-4,892.7	5,896.2	0.00	0.00	0.00
ST3 BHL									
9,148.4	91.50	270.32	2,956.0	3,290.4	-4,894.2	5,897.4	0.00	0.00	0.00
TD at 9081.4 - ST3 BHL 2									

Payzone Directional Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well San Juan 32-5 Unit COM #114
Company:	Southland Royalty	TVD Reference:	San Juan 32-5 Unit COM #114 @ 6487.0usft (KB)
Project:	Rio Arriba County	MD Reference:	San Juan 32-5 Unit COM #114 @ 6487.0usft (KB)
Site:	Fruitland Coal Prospect	North Reference:	True
Well:	San Juan 32-5 Unit COM #114	Survey Calculation Method:	Minimum Curvature
Wellbore:	ST 3		
Design:	Design #7		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
ST3 BHL 2 - plan hits target center - Point	0.00	0.00	2,956.0	3,290.4	-4,894.2	2,175,669.36	616,828.13	36° 58' 42.419 N	107° 26' 0.138 W
ST 3 LPT - plan hits target center - Point	0.00	0.00	3,072.0	2,342.7	-926.5	2,174,739.00	620,800.00	36° 58' 33.052 N	107° 25' 11.237 W

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,179.7	2,967.0	FRUITLAND COAL				
4,475.3	3,065.0	FRUITLAND HZ COAL TOP				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
4,179.3	2,966.8	2,008.1	-788.0	Start DLS 18.09 TFO 79.42	
4,576.4	3,072.1	2,336.0	-927.5	Start 6.7 hold at 4509.4 MD	
4,583.1	3,072.0	2,342.7	-926.5	Start DLS 7.13 TFO -88.40	
5,968.0	3,039.3	3,272.7	-1,715.0	Start 3180.4 hold at 5901.0 MD	
9,148.4	2,956.0	3,290.4	-4,894.2	TD at 9081.4	

Southland Royalty

Well Name: San Juan 32-5 Unit COM #114
 Surface Location: Fruitland Coal Prospect
 NAD 1927 (NADCON CONUS) US State Plane 1927 (Exact solution) New Mexico West 3003
 Ground Elevation: 6472.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 2172400.40 621736.70 36° 58' 9.887 N 107° 24' 59.819 W
 KB San Juan 32-5 Unit COM #114 @ 6487.0usft (KB)



Azimuths to True North
 Magnetic North: 9.14°
 Magnetic Field
 Strength: 50205.1nT
 Dip Angle: 63.59°
 Date: 6/27/2017
 Model: IGRF2015

Fruitland Coal Prospect
 San Juan 32-5 Unit COM #114
 Design #7
 7:39, July 12 2017

