

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Energen Resources Corporation

3a. Address

2198 Bloomfield Highway, Farmington, NM 87401

3b. Phone No. (include area code)

505.325.6800

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

S3, T30N, R10W 1710' FSL, 1120' FWL NWSW

5. Lease Serial No.

SF 080917

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

Hart Canyon 3 #2S

9. API Well No.

3004533112

10. Field and Pool, or Exploratory Area

Basin Fruitland Coal

11. County or Parish, State

San Juan NM

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

TYPE OF SUBMISSION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- | | | | |
|--|---|--|---|
| ☐ Acidize | ☐ Deepen | ☐ Production (Start/Resume) | ☐ Water Shut-Off |
| ☐ Alter Casing | ☐ Fracture Treat | ☐ Reclamation | ☐ Well Integrity |
| ☐ 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 recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

Energen Resources plans to make the following changes to the Hart Canyon 3 #2S well:

*Plug back the 8 3/4" wellbore from 4674' (MD), 3200' (TVD) to 3925' (MD), 2907' (TVD).

*Drill a 6 1/4" wellbore from 3925' (MD), 2907' (TVD) to 5816' (MD), 3020' (TVD) as per the attached directional plan.

*Set an uncemented 4 1/2" 11.6 ppf liner from 3862' +/- (MD) to 5816' (MD).

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Nathan Smith

Title

Drilling Engineer

Date 07/14/05

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Office

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.

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes 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.



Field: NEW MEXICO
Site: HART CANYON 3#2S
Well: Well #2
Wellpath: Lower Lateral (66)
Plan: Plan #3

ENERGEN

SECTION DETAILS

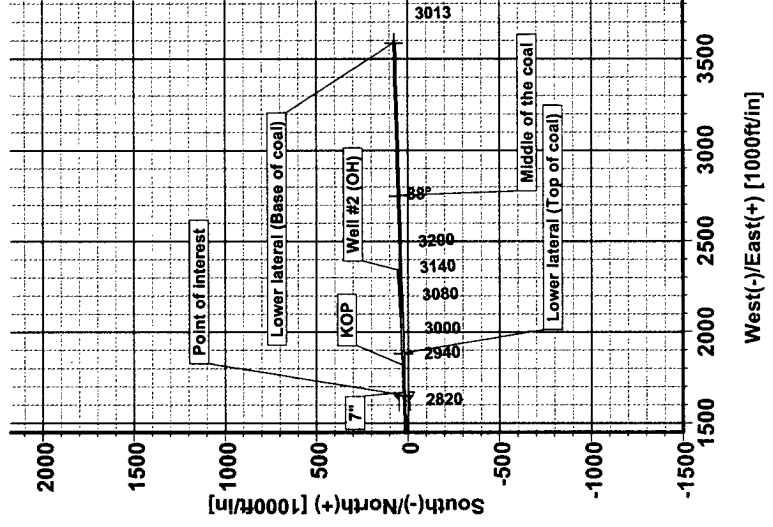
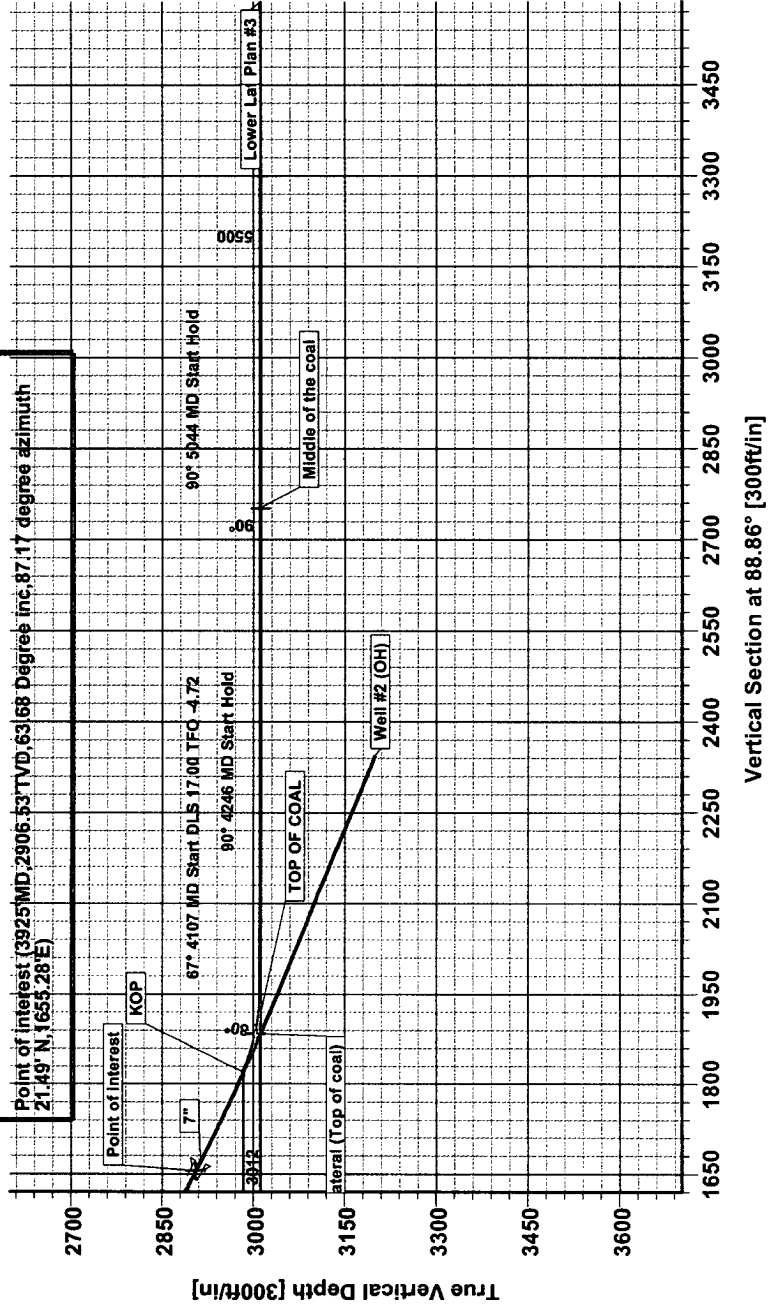
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	4107.48	66.50	90.34	2984.46	26.47	1820.13	0.00	0.00	1820.29	
2	4246.13	90.00	88.46	3012.50	27.98	1954.91	17.00	-4.72	1955.08	Middle of the coal
3	5044.01	90.00	88.46	3012.50	49.49	2752.50	0.00	0.00	2752.94	
4	5882.00	90.00	88.46	3012.50	72.08	3590.18	0.00	0.00	3590.91	

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Point of Interest	2906.53	21.49	1655.28	2128344.15	26034.65	Point
Lower lateral (Top of coal)	3005.00	26.64	1884.12	2128349.30	26263.49	Point
Middle of the coal	3012.50	49.49	2752.50	2128372.15	27131.87	Point
Lower lateral (Base of coal)	3020.00	72.08	3590.18	2128394.74	27969.55	Point

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Well #2	0.00	0.00	2128322.66	24379.37	36°50'17.000N	107°52'31.000W	N/A





Scientific Drilling Planning Report

Company: ENERGEN RESOURCES CORPORATION Field: NEW MEXICO Site: HART CANYON 3#2S Well: Well #2 Wellpath: Lower Lateral (66)	Date: 7/14/2005 Co-ordinate(NE) Reference: Well: Well #2, Grid North Vertical (TVD) Reference: SITE 6349.0 Section (VS) Reference: Well (0.00N,0.00E,88.86Azi) Plan: Plan #3	Time: 14:21:00 Page: 1
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Field: NEW MEXICO Map System: US State Plane Coordinate System 1927 Geo Datum: NAD27 (Clarke 1866) Sys Datum: Mean Sea Level	Map Zone: New Mexico, Central Zone Coordinate System: Well Centre Geomagnetic Model: bggm2005
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Site: HART CANYON 3#2S			
Site Position:	Northing: 2128322.66 ft	Latitude: 36 50 17.000 N	
From: Map	Easting: 24379.37 ft	Longitude: 107 52 31.000 W	
Position Uncertainty: 0.00 ft		North Reference: Grid	
Ground Level: 6334.00 ft		Grid Convergence: -0.97 deg	

Well: Well #2	Slot Name:
Well Position: +N/-S 0.00 ft	Northing: 2128322.66 ft
+E/-W 0.00 ft	Easting: 24379.37 ft
Position Uncertainty: 0.00 ft	Latitude: 36 50 17.000 N
	Longitude: 107 52 31.000 W

Wellpath: Lower Lateral (66)	Drilled From: OH		
Current Datum: SITE	Tie-on Depth: 4107.48 ft		
Magnetic Data: 7/14/2005	Above System Datum: Mean Sea Level		
Field Strength: 51435 nT	Declination: 10.71 deg		
Vertical Section: Depth From (TVD)	Mag Dip Angle: 63.70 deg		
ft	+N/-S ft	+E/-W ft	Direction deg
0.00	0.00	0.00	88.86

Plan: Plan #3	Date Composed: 7/14/2005
Principal: Yes	Version: 1
	Tied-to: From: Definitive Path

Plan Section Information										
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
4107.48	66.50	90.34	2984.46	26.47	1820.13	0.00	0.00	0.00	0.00	
4246.13	90.00	88.46	3012.50	27.98	1954.91	17.00	16.95	-1.36	-4.72	
5044.01	90.00	88.46	3012.50	49.49	2752.50	0.00	0.00	0.00	0.00	Middle of the coal
5882.00	90.00	88.46	3012.50	72.08	3590.18	0.00	0.00	0.00	0.00	

Section 1 : Start DLS 17.00 TFO -4.72

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
3925.00	63.68	87.17	2906.53	21.49	1655.28	1655.38	0.00	0.00	0.00	0.00
3942.00	63.91	87.13	2914.02	22.23	1670.52	1670.63	1.33	1.31	-0.23	-9.10
4107.00	66.49	90.36	2984.27	26.47	1819.69	1819.85	2.36	1.56	1.95	49.26
4107.48	66.50	90.34	2984.46	26.47	1820.13	1820.29	3.49	2.35	-2.81	-47.56
4125.00	69.47	90.08	2991.03	26.41	1836.37	1836.53	17.00	16.94	-1.49	-4.72
4150.00	73.71	89.72	2998.92	26.45	1860.08	1860.24	17.00	16.95	-1.43	-4.63
4174.80	77.91	89.38	3005.00	26.64	1884.12	1884.27	17.00	16.95	-1.37	-4.51
4175.00	77.94	89.38	3005.04	26.64	1884.31	1884.47	17.00	16.95	-1.34	-4.43
4200.00	82.18	89.05	3009.36	26.98	1908.93	1909.09	17.00	16.95	-1.32	-4.43
4225.00	86.42	88.73	3011.84	27.46	1933.80	1933.96	17.00	16.95	-1.30	-4.37
4246.13	90.00	88.46	3012.50	27.98	1954.91	1955.08	17.00	16.95	-1.29	-4.34

Section 2 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
4300.00	90.00	88.46	3012.50	29.43	2008.76	2008.95	0.00	0.00	0.00	0.00
4400.00	90.00	88.46	3012.50	32.13	2108.72	2108.94	0.00	0.00	0.00	0.00
4500.00	90.00	88.46	3012.50	34.82	2208.68	2208.94	0.00	0.00	0.00	0.00
4600.00	90.00	88.46	3012.50	37.52	2308.65	2308.94	0.00	0.00	0.00	0.00



Scientific Drilling Planning Report

Company: ENERGEN RESOURCES CORPORATION	Date: 7/14/2005	Time: 14:21:00	Page: 2
Field: NEW MEXICO	Co-ordinate(NE) Reference: Well: Well #2, Grid North		
Site: HART CANYON 3#2S	Vertical (TVD) Reference: SITE 6349.0		
Well: Well #2	Section (VS) Reference: Well (0.00N,0.00E,88.86Azi)		
Wellpath: Lower Lateral (66)	Plan:	Plan #3	

Section 2 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
4700.00	90.00	88.46	3012.50	40.22	2408.61	2408.94	0.00	0.00	0.00	0.00
4800.00	90.00	88.46	3012.50	42.91	2508.58	2508.93	0.00	0.00	0.00	0.00
4900.00	90.00	88.46	3012.50	45.61	2608.54	2608.93	0.00	0.00	0.00	0.00
5000.00	90.00	88.46	3012.50	48.30	2708.50	2708.93	0.00	0.00	0.00	0.00
5044.01	90.00	88.46	3012.50	49.49	2752.50	2752.94	0.00	0.00	0.00	0.00

Section 3 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
5100.00	90.00	88.46	3012.50	51.00	2808.47	2808.93	0.00	0.00	0.00	0.00
5200.00	90.00	88.46	3012.50	53.69	2908.43	2908.92	0.00	0.00	0.00	0.00
5300.00	90.00	88.46	3012.50	56.39	3008.39	3008.92	0.00	0.00	0.00	0.00
5400.00	90.00	88.46	3012.50	59.09	3108.36	3108.92	0.00	0.00	0.00	0.00
5500.00	90.00	88.46	3012.50	61.78	3208.32	3208.92	0.00	0.00	0.00	0.00
5600.00	90.00	88.46	3012.50	64.48	3308.29	3308.91	0.00	0.00	0.00	0.00
5700.00	90.00	88.46	3012.50	67.17	3408.25	3408.91	0.00	0.00	0.00	0.00
5800.00	90.00	88.46	3012.50	69.87	3508.21	3508.91	0.00	0.00	0.00	0.00
5882.00	90.00	88.46	3012.50	72.08	3590.18	3590.91	0.00	0.00	0.00	0.00

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
3925.00	63.68	87.17	2906.53	21.49	1655.28	1655.38	0.00	0.00	0.00	Point of interest 7" KOP
3942.00	63.91	87.13	2914.02	22.23	1670.52	1670.63	1.33	1.31	-0.23	
4107.00	66.49	90.36	2984.27	26.47	1819.69	1819.85	2.36	1.56	1.95	
4107.48	66.50	90.34	2984.46	26.47	1820.13	1820.29	3.49	2.35	-2.81	
4125.00	69.47	90.08	2991.03	26.41	1836.37	1836.53	17.00	16.94	-1.49	
4150.00	73.71	89.72	2998.92	26.45	1860.08	1860.24	17.00	16.95	-1.43	Lower lateral (Top of coa
4174.80	77.91	89.38	3005.00	26.64	1884.12	1884.27	17.00	16.95	-1.37	
4175.00	77.94	89.38	3005.04	26.64	1884.31	1884.47	17.00	16.95	-1.34	
4200.00	82.18	89.05	3009.36	26.98	1908.93	1909.09	17.00	16.95	-1.32	
4225.00	86.42	88.73	3011.84	27.46	1933.80	1933.96	17.00	16.95	-1.30	
4246.13	90.00	88.46	3012.50	27.98	1954.91	1955.08	17.00	16.95	-1.29	
4300.00	90.00	88.46	3012.50	29.43	2008.76	2008.95	0.00	0.00	0.00	
4400.00	90.00	88.46	3012.50	32.13	2108.72	2108.94	0.00	0.00	0.00	
4500.00	90.00	88.46	3012.50	34.82	2208.68	2208.94	0.00	0.00	0.00	
4600.00	90.00	88.46	3012.50	37.52	2308.65	2308.94	0.00	0.00	0.00	
4700.00	90.00	88.46	3012.50	40.22	2408.61	2408.94	0.00	0.00	0.00	
4800.00	90.00	88.46	3012.50	42.91	2508.58	2508.93	0.00	0.00	0.00	
4900.00	90.00	88.46	3012.50	45.61	2608.54	2608.93	0.00	0.00	0.00	
5000.00	90.00	88.46	3012.50	48.30	2708.50	2708.93	0.00	0.00	0.00	
5044.01	90.00	88.46	3012.50	49.49	2752.50	2752.94	0.00	0.00	0.00	
5100.00	90.00	88.46	3012.50	51.00	2808.47	2808.93	0.00	0.00	0.00	Middle of the coal
5200.00	90.00	88.46	3012.50	53.69	2908.43	2908.92	0.00	0.00	0.00	
5300.00	90.00	88.46	3012.50	56.39	3008.39	3008.92	0.00	0.00	0.00	
5400.00	90.00	88.46	3012.50	59.09	3108.36	3108.92	0.00	0.00	0.00	
5500.00	90.00	88.46	3012.50	61.78	3208.32	3208.92	0.00	0.00	0.00	
5600.00	90.00	88.46	3012.50	64.48	3308.29	3308.91	0.00	0.00	0.00	
5700.00	90.00	88.46	3012.50	67.17	3408.25	3408.91	0.00	0.00	0.00	
5800.00	90.00	88.46	3012.50	69.87	3508.21	3508.91	0.00	0.00	0.00	
5882.00	90.00	88.46	3012.50	72.08	3590.18	3590.91	0.00	0.00	0.00	



Scientific Drilling Planning Report

Company: ENERGEN RESOURCES CORPORATION
Field: NEW MEXICO
Site: HART CANYON 3#2S
Well: Well #2
Wellpath: Lower Lateral (66)

Date: 7/14/2005 Time: 14:21:00
Co-ordinate(NE) Reference: Well: Well #2, Grid North
Vertical (TVD) Reference: SITE 6349.0
Section (VS) Reference: Well (0.00N,0.00E,88.86Azi)
Plan: Plan #3

Page: 3

Targets

Name	Description Dip. Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	← Latitude → Deg Min Sec			← Longitude → Deg Min Sec		
Lower lateral (Top of coal)		3005.00	26.64	1884.12	2128349.30	26263.49	36	50	17.580 N	107	52	7.836 W
-Plan hit target												
Middle of the coal		3012.50	49.49	2752.50	2128372.15	27131.87	36	50	17.951 N	107	51	57.162 W
Lower lateral (Base of coal)		3020.00	72.08	3590.18	2128394.74	27969.55	36	50	18.314 N	107	51	46.865 W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
3942.00	2914.02	7.000	8.500	7"

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
4174.80	3005.00	TOP OF COAL		0.00	0.00
5044.01	3012.50	MIDDLE OF COAL		0.00	0.00
	0.00	BASE OF COAL		0.00	0.00

Annotation

MD ft	TVD ft	
4107.00	2984.27	KOP
3925.00	2906.53	Point of interest