Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

SUNDRY NOTICES AND REPORTS ON WELLS

FORM APPROVED
OMB NO. 1004-0137
Expires July 31, 2010

5. Lease Serial No.

USA	SF-	080657	,
			_

Do not use this form for abandoned well. Use Form				6. If Indian, Allottee or Tribe Name
SUBMIT IN TRIPLICAT	TE - Other instructio	ns on page 2		7. If Unit or CA/Agreement, Name and/or No San Juan 32-5 Unit
Type of Well Oil Well		OCT 26 20	10	8. Well Name and No. San Juan 32-5 Unit 111
Name of Operator Energen Resources Corporation		Farmington Field	Office	
3a. Address		3b. Phone No. (include are	l ageme ni ea code)	9. API Well No. 30-039-26637
2010 Afton Place, Farmington, NM 8	7401	505-325-6800		10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey I	- ·			Basin Fruitland Coal
SHL: (A) Sec.31-T32N-R05W; 1005'FN BHL: (P) Sec.31-T32N-R05W; 760'FSL				11. County or Parish, State Rio Arriba NM
12. CHECK APPROPRIATI	E BOX(ES) TO IND	DICATE NATURE OF N	OTICE, REPO	
TYPE OF SUBMISSION			PE OF ACTION	,
X Notice of Intent	Acidize	Deepen	Productio	n (Start/Resume) Water Shut-Off
Subsequent Report	Alter Casing	Fracture Treat	Reclamat	on Well Integrity
	Casing Repair	New Construction	X Recomple	ete Other
Final Abandonment Notice	Change Plans	Plug and Abandon	Temporar	ily Abandon
	Convert to Injection	n Plug Back	Water Dis	sposal
Energen Resources would like to roff of the existing vertical well wellplan. A whipstock will be set 3100'-3108'+/- (TVD). The lateral drilled liner will be ran and set	bore as indicate at 3115'+/- (TV will be drilled	ed on the revised a /D) and a window mi I to 6779 MD, 3354	attached C- illed in th	102 and directional existing 7" casing from
ESE ATTACHED FOR CONDITIONS OF AFPROVA		UDITIONS OF API te to previously issued s		RECEIVED 600 OIL CONS. DIV. DIST, 3
14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)				
Stephen Byers		Title Drilli	ng Engineer	
Signature Stepher Regers		Date 10/26/20	10	
_, THIS	SPACE FOR FED	ERAL OR STATE OF	FICE USE	
Approved by		Title		Date
Conditions of approval, II any, are attached. Approval of this not the applicant holds legal or equitable title to those rights in the sul entitle the applicant to conduct operations thereon.		fy that Office	· rus.	17611
Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, reficitious or fraudulent statements or representations as to any ma		son knowingly and willfully to r	nake to any depart	ment or agency of the United States any false,

NMOCD

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico

Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-102 Revised July 16, 2010 Submit one copy to appropriate District Office

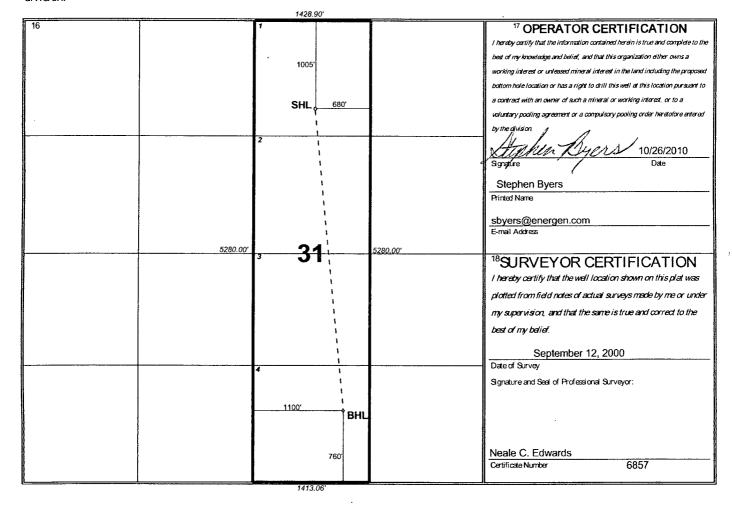
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code	³ Pool Name		
30-039-26637	71629	Basin Fruitland Coal		
⁴ Property Code	⁵ Property Name	° Well Number		
21996	San Juan 32-5 l	Jnit 111		
OGRID No.	^a Operator Name	e Elevation		
162928	Energen Resources C	orporation 6654'		

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Α	31	32N	5W	\	1005	North	680	East	Rio Arriba
¹¹ Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lotidn	Feet from the	North/South line	Feet from the	East/West line	County
Р	31	32N	5W	4	760	South	1100	West	Rio Arriba
12 Dedicated Acre	s ¹³ Joint o	r Infili 14	Consolidation C	ode ¹⁸ Or	der No.				
.345.59							NSP 18	247	_

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.





Energen Resources Corp.

SJBR Sec.31-T32N-R05W Eul Canyon San Juan 32-5 Unit #111 ST Re-Entry Horizontal OPE FTC

Plan: Sidetrack Plan #2

DIRECTIONAL PLAN

25 October, 2010

Prepared By: Stephen Byers



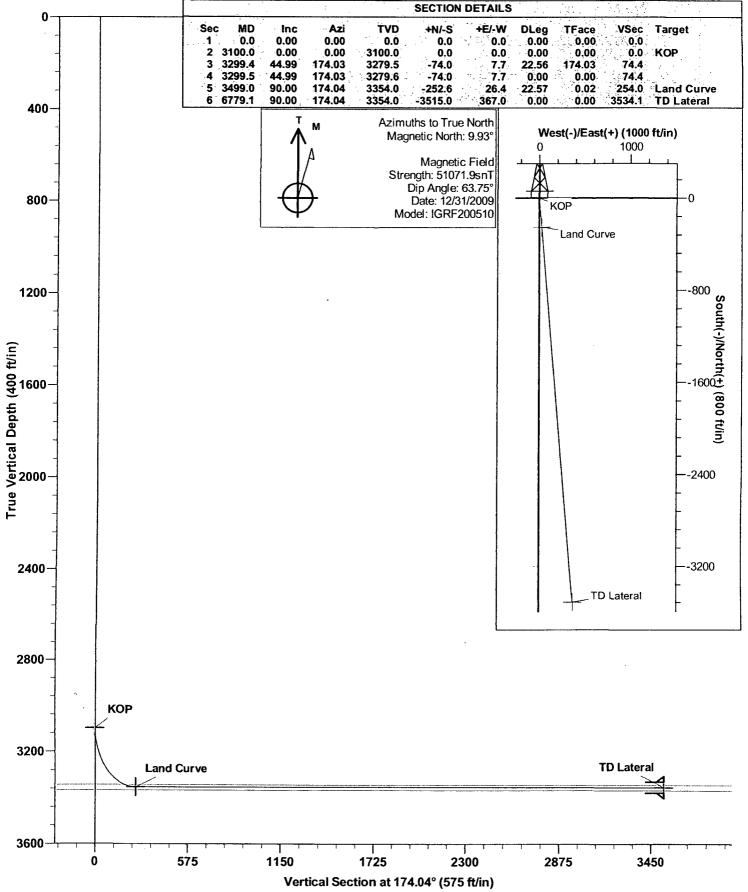
Project: SJBR Sec.31-T32N-R05W

Site: Eul Canyon

Well: San Juan 32-5 Unit #111 ST Wellbore: Re-Entry Horizontal OPE FTC Geodetic System: US State Plane 1983

Ellipsoid: GRS 1980

Datum: North American Datum 1983 Zone: New Mexico Central Zone



Energen

DIRECTIONAL PLAN



Company:

Energen Resources

Project:

SJBR Sec.31-T32N-R05W

Site:

Eul Canyon

Well:

Wellbore: Design:

San Juan 32-5 Unit #111 ST

Sidetrack Plan #2

Re-Entry Horizontal OPE FTC

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method: Database:

Well San Juan 32-5 Unit #111 ST

KB @ 6669.0ft (KB)

KB @ 6669.0ft (KB)

True Minimum Curvature

EDM 2003.16 Single User Db

Project

SJBR Sec.31-T32N-R05W

Map System: Geo Datum:

US State Plane 1983 North American Datum 1983

Map Zone:

New Mexico Central Zone

System Datum:

Mean Sea Level

Site

Eul Canyon

Site Position: From:

Lat/Long

Northing: Easting:

2,164,003.49ft 1,305,313.78ft

Latitude:

Longitude:

36° 56' 29.292 N

Position Uncertainty:

0.0 ft

Slot Radius:

107° 23' 48.120 W

-0.69°

Grid Convergence:

Well

San Juan 32-5 Unit #111 ST

Well Position

+N/-S 0.0 ft +E/-W 0.0 ft

Northing: Easting:

2,164,003.49 ft 1,305,313.78 ft

9.93

Latitude: Longitude:

36° 56' 29.292 N 107° 23' 48.120 W

Position Uncertainty

0.0 ft

Wellhead Elevation:

6,654.0 ft

Ground Level:

51,072

6,654.0ft

Wellbore

Re-Entry Horizontal OPE FTC

IGRF200510

Magnetics

Model Name

Sample Date

12/31/2009

Declination (°)

Dip Angle (°)

Field Strength

(nT)

Sidetrack Plan #2

Audit Notes:

Design

Version:

Phase:

PROTOTYPE

Tie On Depth:

0.0

63.75

Depth From (TVD)

+N/-S

+E/-W (ft)

Direction

Vertical Section:

(ft) 0.0 (ft) 0.0

0.0

(°) 174.04

Survey Tool Prog	jram .		Date	10/25/2010		
From (ft)		To (ft)	Survey	(Wellbore)	Tool Name	Description
0.	0	6,779.	Sidetra	ck Plan #2 (Re-Entry Horizontal OP	MWD	MWD - Standard

ned Survey							
MD (ft)	TVD (ft)	Inc (°)	Azi (°)	Build (°/100ft)	N/S (ft)	E/W (ft)	V. Sec (ft)
0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0
100.0	100.0	0.00	0.00	0.00	0.0	0.0	0.0
200.0	200.0	0.00	0.00	0.00	0.0	0.0	0.0
300.0	300.0	0.00	0.00	0.00	0.0	0.0	0.0
400.0	400.0	0.00	0.00	0.00	0.0	. 0.0	0.0
500.0	500.0	0.00	0.00	0.00	0.0	0.0	0.0
600.0	600.0	0.00	0.00	0.00	0.0	0.0	0.0
700.0	700.0	0.00	0.00	0.00	0.0	0.0	0.0
0.008	800.0	0.00	0.00	0.00	0.0	0.0	0.0
900.0	900.0	0.00	0.00	0.00	0.0	0.0	0.0
1,000.0	1,000.0	0.00	0.00	0.00	0.0	0.0	0.0
1,100.0	1,100.0	0.00	0.00	0.00	0.0	0.0	0.0

Energen DIRECTIONAL PLAN

Company: Project:

Energen Resources SJBR Sec.31-T32N-R05W

Site:

Eul Canyon

Well: Wellbore:

San Juan 32-5 Unit #111 ST

Design:

Re-Entry Horizontal OPE FTC

Sidetrack Plan #2

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Database:

Well San Juan 32-5 Unit #111 ST

KB @ 6669.0ft (KB) KB @ 6669.0ft (KB)

True

Minimum Curvature

EDM 2003.16 Single User Db

ned Survey							
MD (ft)	TVD (ft)	Inc (°)	Azi (°)	Build (°/100ft)	N/S (ft)	E/W (ft)	V. Sec (ft)
1,200.0	1,200.0	0.00	0.00	0.00	0.0	0.0	0.0
1,300.0	1,300.0	0.00	0.00	0.00	0.0	0.0	0.0
1,400.0	1,400.0	0.00	0.00	0.00	0.0	0.0	0.0
1,500.0	1,500.0	0.00	0.00	0.00	0.0	0.0	0.0
1,600.0	1,600.0	0.00	0.00	0.00	0.0	0.0	0.0
1,700.0	1,700.0	0.00	0.00	0.00	0.0	0.0	0.0
1,800.0	1,800.0	0.00	0.00	0.00	0.0	0.0	0.0
1,900.0	1,900.0	0.00	0.00	0.00	0.0	0.0	0.0
2,000.0	2,000.0	0.00	0.00	0.00	0.0	0.0	0.0
2,100.0	2,100.0	0.00	0.00	0.00	0.0	0.0	0.0
2,200.0	2,200.0	0.00	0.00	0.00	0.0	0.0	0.0
2,300.0	2,300.0	0.00	0.00	0.00	0.0	0.0	0.0
2,400.0	2,400.0	0.00	0.00	0.00	0.0	0.0	0.0
2,500.0	2,500.0	0.00	0.00	0.00	0.0	0.0	0.0
2,600.0	2,600.0	0.00	0.00	0.00	0.0	0.0	0.0
2,700.0	2,700.0	0.00	0.00	0.00	0.0	0.0	0.0
2,800.0	2,800.0	0.00	0.00	0.00	0.0	0.0	0.0
2,900.0	2,900.0	0.00	0.00	0.00	0.0	0.0	0.0
3,000.0	3,000.0	0.00	0.00	0.00	0.0	0.0	0.0
3,100.0	3,100.0	0.00	0.00	0.00	0.0	0.0	0.0
				OP			
3,125.0	3,125.0	5.64	174.03	22.56	-1.2	0.1	1.2
3,150.0	3,149.7	11.28	174.03	22.56	-4.9	0.5	4.9
3,175.0	3,173.9	16.92	174.03	22.56	-10.9	1.1	11.0
3,200.0	3,197.4	22.56	174.03	22.56	-19.3	2.0	19.4
3,225.0	3,220.0	28.20	174.03	22.56	-30.0	3.1	30.1
3,250.0	3,241.4	33.84	174.03	22.56	-42.8	4.5	43.0
3,275.0	3,261.5	39.49	174.03	22.56	-57.6	6.0	58.0
3,299.4	3,279.5	44.99	174.03	22.55	-74.0	7.7	74.4
3,299.5	3,279.6	44.99	174.03	0.00	-74.0	7.7	74.4
3,325.0	3,296.7	50.74	174.03	22.57	-92.8	9.7	93.3
3,350.0	3,311.5	56.39	174.03	22.57	-112.8	11.8	113.4
3,375.0	3,324.3	62.03	174.03	22.57	-134.2	14.0	134.9
3,400.0	3,335.0	67.67	174.04	22.57	-156.7	16.4	157.5
3,425.0	3,343.3	73.31	174.04	22.57	-180.1	18.8	181.1
3,427.4	3,344.0	73.86	174.04	22.57	-182.4	19.1	183.4
3,450.0	3,349.3	78.95	Top Ta 174.04	rget Coal 22.57	-204.2	21.3	205.3
3,450.0 3,475.0	3,349.3 3,352.9	78.95 84.59	174.04		-204.2 -228.8	21.3	230.1
3,475.0 3,499.0	3,354.0	90.00	174.04	22.57 22.58	-228.6 -252.6	23.9 26.4	254.0
-, .00.0	0,001.0	55.55		Curve	202.0	20.4	٤٥٦.∪
3,500.0	3,354.0	90.00	174.04	0.00	-253.6	26.5	255.0
3,600.0	3,354.0	90.00	174.04	0.00	-353.1	36.9	355.0
3,700.0	3,354.0	90.00	174.04	0.00	-452.6	47.3	455.0
3,800.0	3,354.0	90.00	174.04	0.00	-552.0	57.7	555.0

Energen

DIRECTIONAL PLAN

Company: Project:

Energen Resources

roject: SJBR Sec.31-T32N-R05W

Site: Well: Eul Canyon

Wellbore: Re-Entry

Design:

San Juan 32-5 Unit #111 ST Re-Entry Horizontal OPE FTC

Sidetrack Plan #2

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well San Juan 32-5 Unit #111 ST

KB @ 6669.0ft (KB) KB @ 6669.0ft (KB)

True

Minimum Curvature

EDM 2003.16 Single User Db

TVD (ft) 3,354.0 3,354.0 3,354.0 3,354.0 3,354.0 3,354.0 3,354.0 3,354.0	90.00 90.00 90.00 90.00 90.00 90.00	Azi (°) 174.04 174.04 174.04	Build (°/100ft) 0.00 0.00 0.00	N/S (ft) -651.5 -750.9	E/W (ft) 68.0	V. Sec (ft) 655.0
(ft) 3,354.0 3,354.0 3,354.0 3,354.0 3,354.0 3,354.0	90.00 90.00 90.00 90.00 90.00	(°) 174.04 174.04 174.04	(°/100ft) 0.00 0.00	(ft) -651.5	(ft) 68.0	
3,354.0 3,354.0 3,354.0 3,354.0 3,354.0	90.00 90.00 90.00 90.00	174.04 174.04	0.00			655.0
3,354.0 3,354.0 3,354.0 3,354.0 3,354.0	90.00 90.00 90.00	174.04		-750.9		
3,354.0 3,354.0 3,354.0 3,354.0	90.00 90.00		0.00		78.4	755.0
3,354.0 3,354.0 3,354.0	90.00	174.04		-850.4	88.8	855.0
3,354.0 3,354.0			0.00	-949.9	99.2	955.0
3,354.0		174.04	0.00	-1,049.3	109.6	1,055.0
	90.00	174.04	0.00	-1,148.8	120.0	1,155.0
3 354 0	90.00	174.04	0.00	-1,248.2	130.3	1,255.0
J,JJ4.U	90.00	174.04	0.00	-1,347.7	140.7	1,355.0
3,354.0	90.00	174.04	0.00	-1,447.2	151.1	1,455.0
3,354.0	90.00	174.04	0.00	-1,546.6	161.5	1,555.0
3,354.0	90.00	174.04	0.00	-1,646.1	171.9	1,655.0
3,354.0	90.00	174.04	0.00	-1,745.5	182.3	1,755.0
3,354.0	90.00	174.04	0.00	-1,845.0	192.6	1,855.0
3,354.0	90.00	174.04	0.00	-1,944.5	203.0	1,955.0
3,354.0	90.00	174.04	0.00	-2,043.9	213.4	2,055.0
3,354.0	90.00	174.04	0.00	-2,143.4	223.8	2,155.0
3,354.0	90.00	174.04	0.00	-2,242.8	234.2	2,255.0
3,354.0	90.00	174.04	0.00	-2,342.3	244.6	2,355.0
3,354.0	90.00	174.04	0.00	-2,441.7	254.9	2,455.0
3,354.0	90.00	174.04	0.00	-2,541.2	265.3	2,555.0
3,354.0	90.00	174.04	0.00	-2,640.7	275.7	2,655.0
3,354.0	90.00	174.04	0.00	-2,740.1	286.1	2,755.0
3,354.0	90.00	174.04	0.00	-2,839.6	296.5	2,855.0
3,354.0	90.00	174.04	0.00	-2,939.0	306.9	2,955.0
3,354.0	90.00	174.04	0.00	-3,038.5	317.2	3,055.0
3,354.0	90.00	174.04	0.00	-3,138.0	327.6	3,155.0
3,354.0	90.00	174.04	0.00	-3,237.4	338.0	3,255.0
3,354.0	90.00	174.04	0.00	-3,336.9	348.4	3,355.0
3,354.0	90.00	174.04	0.00	-3,436.3	358.8	3,455.0
3,354.0	90.00	174.04	0.00	-3,515.0	367.0	3,534.1
	3,354.0 3,354.0 3,354.0 3,354.0 3,354.0 3,354.0	3,354.0 90.00 3,354.0 90.00 3,354.0 90.00 3,354.0 90.00 3,354.0 90.00 3,354.0 90.00	3,354.0 90.00 174.04 3,354.0 90.00 174.04 3,354.0 90.00 174.04 3,354.0 90.00 174.04 3,354.0 90.00 174.04 3,354.0 90.00 174.04 3,354.0 90.00 174.04 3,354.0 90.00 174.04	3,354.0 90.00 174.04 0.00 3,354.0 90.00 174.04 0.00 3,354.0 90.00 174.04 0.00 3,354.0 90.00 174.04 0.00 3,354.0 90.00 174.04 0.00 3,354.0 90.00 174.04 0.00 3,354.0 90.00 174.04 0.00	3,354.0 90.00 174.04 0.00 -2,939.0 3,354.0 90.00 174.04 0.00 -3,038.5 3,354.0 90.00 174.04 0.00 -3,138.0 3,354.0 90.00 174.04 0.00 -3,237.4 3,354.0 90.00 174.04 0.00 -3,336.9 3,354.0 90.00 174.04 0.00 -3,436.3 3,354.0 90.00 174.04 0.00 -3,515.0	3,354.0 90.00 174.04 0.00 -2,939.0 306.9 3,354.0 90.00 174.04 0.00 -3,038.5 317.2 3,354.0 90.00 174.04 0.00 -3,138.0 327.6 3,354.0 90.00 174.04 0.00 -3,237.4 338.0 3,354.0 90.00 174.04 0.00 -3,336.9 348.4 3,354.0 90.00 174.04 0.00 -3,436.3 358.8 3,354.0 90.00 174.04 0.00 -3,515.0 367.0

Energen

DIRECTIONAL PLAN

Company:

Energen Resources

Project:

SJBR Sec.31-T32N-R05W

Site:

Eul Canyon

Well:

San Juan 32-5 Unit #111 ST

Wellbore: Design:

Re-Entry Horizontal OPE FTC Sidetrack Plan #2

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference: **Survey Calculation Method:**

Database:

Well San Juan 32-5 Unit #111 ST

KB @ 6669.0ft (KB) KB @ 6669.0ft (KB)

True

Minimum Curvature

EDM 2003.16 Single User Db

Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Land Curve - plan hits target - Point	0.00	0.00	3,354.0	-252.6	26.4	2,163,750.59	1,305,337.14	36° 56' 26.794 N	107° 23' 47.795 W
TD Lateral - plan hits target - Point	0.00	0.00	3,354.0	-3,515.0	367.0	2,160,484.33	1,305,638.47	36° 55′ 54.538 N	107° 23' 43.600 W
KOP - plan hits target - Point	0.00	0.00	3,100.0	0.0	0.0	2,164,003.49	1,305,313.78	36° 56' 29.292 N	107° 23' 48.120 W

Casing Points					
	Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Hole Diameter Diameter (") (")	
	6,779.0	3,354.0	Liner	4-1/2 6-1/4	

Formations						
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
	3,427.4	3,344.0 3,368.0	Top Target Coal Base Target Coal		0.00	

Checked By:	Approved By	: Dat	۵.
Onconda By.	/\ppioved by		·

BLM CONDITIONS OF APPROVAL

5

CASING REPAIR, WORKOVER AND RECOMPLETION OPERATIONS:

- 1. If casing repair operations are needed, obtain prior approval from this office before commencing repairs.
- 2. A properly functioning BOP and related equipment must be installed prior to commencing casing repair, workover and/or recompletion operations.
- 3. This well is in a Seasonal Closure Area, adhere to closure stipulations from 11/1 thru 3/31.

SURFACE USE OPERATIONS:

The following Stipulations will apply to this well unless a particular Surface Managing Agency or private surface owner has supplied to BLM and operator a contradictory environmental stipulation. The failure of operator to comply with these requirements may result in assessments or penalties pursuant to 43 CFR 3163.1 or 3163.2. A copy of these conditions of approval shall be present on location during construction, drilling and reclamation activity.

An agreement between operator and fee landowner will take precedence over BLM surface stipulations unless (in reference to 43 CFR Part 3160) 1) BLM determines that operator's actions will affect adjacent Federal or Indian surface, or 2) operator does not maintain well area and lease premises in a workmanlike manner with due regard for safety, conservation and appearance, or 3) no such agreement exists, or 4) in the event of well abandonment, minimal Federal restoration requirements will be required.

STANDARD STIPULATIONS: All surface areas disturbed during work-over activities and not in use for production activities will be reseeded. This should occur in the first 90 days after completion of work-over activities.

SPECIAL STIPULATIONS:

- 1. Pits will be fenced during work-over operation.
- 2. All disturbance will be kept on existing pad.
- 3. All pits will be pulled and closed immediately upon completion of the work-over activities.
- 4. Pits will be lined with an impervious material at least 12 mils thick.