

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.

5. Lease Serial No.

NMSF - 079011

6. If Indian, Allottee or Tribe Name

0:05

SUBMIT IN TRIPLICATE - Other instructions on reverse side

RECEIVED  
BLM

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Energen Resources Corporation

3a. Address

2198 Bloomfield Hwy, Farmington, NM 87401

3b. Phone No. (include area code)

505-325-6800

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

At surface: 1345 fml, 225 fwl Sec 24 T32N R06W

At bottom: 1880 fsl, 760 fwl Sec 14 T32N R06W

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

8. Well Name and No.

San Juan 32-5 #114

Unit Com

9. API Well No.

30-039-29790

10. Field and Pool, or Exploratory Area

Basin Fruitland Coal

11. County or Parish, State

Rio Arriba 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

☐ Alter Casing

☐ Casing Repair

☒ Change Plans

☐ Convert to Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☐ Other

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 would like to make the following changes to the San Juan 32-5 Unit Com #114:

Change the dedication acreage from an east half (E/2) dedication of section 14 to a south half (S/2) dedication of section 14.

Change the directional plan to drill the S/2 of section 14 with the following information:

BHL from 660 fml, 1980 fsl to 1880 fsl, 760 fwl.

Intermediate casing set to 4675' (MD), 3190' (TVD).

Lower production lateral set from 4534' - 8397' (MD).

Upper production lateral set from 4320' - 8316' (MD).

RCVD JUN7'07  
OIL CONS. DIV.  
DIST. 3

Attached are revised operations plans, directional plans, and C-102.

Communitization Agreement Required

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

Nathan Smith

Title

Drilling Engineer

Date

5/31/07

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Troy L. Salyers

Title

Petroleum Engineer

Date

6/5/07

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

FFO

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.

**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

2007 MAY 31 AM 9:05 Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☒ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

'API Number		'Pool Code 71629		'Pool Name Basin Fruitland Coal	
'Property Code		'Property Name San Juan 32-5 Unit Com			'Well Number 114
'OGRID No. 162928		'Operator Name Energen Resources Corporation			'Elevation 6472'

**10 Surface Location**

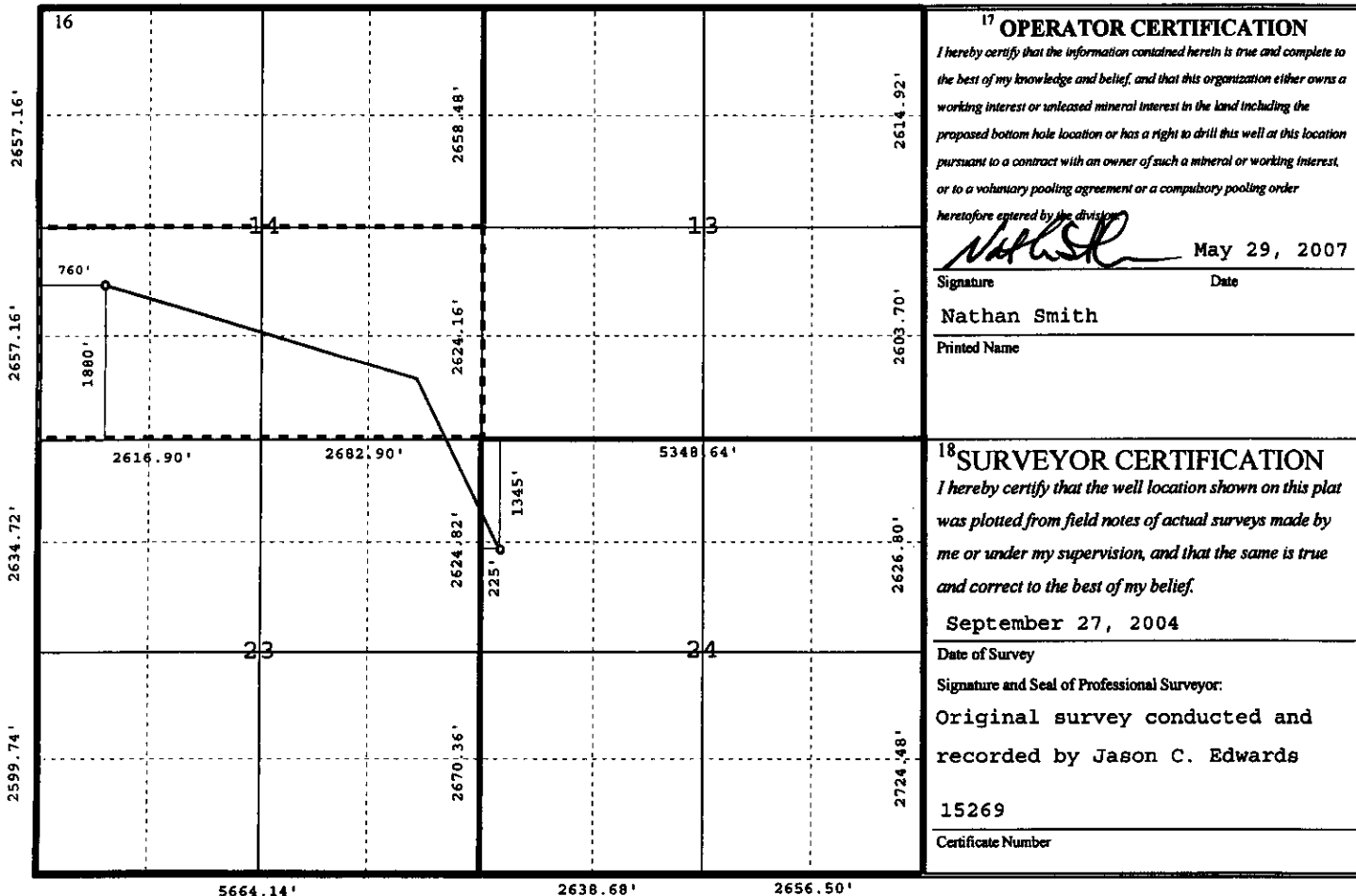
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	24	32N	6W		1345	North	225	West	Rio Arriba

**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
L	14	32N	6W		1880	South	760	West	San Juan
'Dedicated Acres S/2		'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.

2652.54' 2663.10' 5296.50'



## **Operations Plan**

Revised May 31, 2007

### **San Juan 32-5 Unit Com #114**

#### **General Information**

Location	1345' fnl, 225' fwl at surface (sec 24) 1880' fsl, 760' fwl at bottom (sec 14) swnw S24, T32N, R05W Rio Arriba County, New Mexico
Elevations	6472' GL
Total Depth	8397' +/- (MD); 3190' +/- (TVD)
Formation Objective	Basin Fruitland Coal

#### **Formation Tops**

San Jose	Surface
Nacimiento	1027' (TVD)
Ojo Alamo Ss	2397' (TVD), 2647' (MD)
Kirtland Sh	2507' (TVD), 2865' (MD)
Fruitland Fm	2957' (TVD), 4053' (MD)
Target Coal Top (1)	3082' (TVD), 4387' (MD)
Target Coal Base (1)	3102' (TVD), 4440' (MD)
Target Coal Top (2)	3162' (TVD), 4601' (MD)
Target Coal Base (2)	3167' (TVD), 4614' (MD)
Pictured Cliffs Ss	3167' (TVD), 4032' (MD)
Total Depth	3190' (TVD), 8397' (MD)

#### **Drilling**

The 12 1/4" wellbore will be drilled with a fresh water mud system.

The 8 3/4" wellbore will be drilled with a low solids fresh water/polymer mud system. Weighting materials will be drill cuttings and if needed barite. Mud density is expected to range from 8.3 ppg to 8.9 ppg. Kick off point is anticipated to be at 1000 ft (TVD).

The 6 1/4" wellbore will be drilled with a fresh water system or CaCl<sub>2</sub> brine as wellbore and formation pressures dictate. **Bottom hole pressure can be as high as 1600 psi.**

Blowout Control Specifications:

A 2000 psi minimum double ram or annulus BOP stack (figure 1) will be used following nipple up of casing head. A 2" nominal, 2000 psi minimum choke manifold will also be used. An upper Kelly Cock valve handle and drill string valve should be available to fit each drill string and be available on the rig floor during drilling operations.

Logging Program:

Open hole logs: Gamma Ray MWD and mud logs.

Surveys: Surface and as needed for directional surveys.

## Tubulars

### Casing, Tubing, & Casing Equipment:

String	Interval	Wellbore	Casing	Csg Wt	Grade
Surface	0'-200	12 ¼"	9 5/8"	32.3 ppf	H-40 ST&C
Intermediate	200'-4675' (MD) 3190' (TVD)	8 ¾"	7"	23.0 ppf	J-55 LT&C
Production	4534'-8397' (MD) 3137'-3164' (TVD)	6 ¼"	4 ½"	11.6 ppf	J-55 LT&C
	4320'-8316' (MD) 3057'-3092' (TVD)	6 ¼"	4 ½"	11.6 ppf	J-55 LT&C
Tubing	0'-3140' (TVD) 4550' (MD)		2 3/8"	4.7 ppf	J-55

### Casing Equipment:

Surface Casing: Depending on wellbore conditions, a Texas Pattern Guide Shoe on bottom. Casing centralization with standard bow spring centralizers to achieve optimal standoff.

Intermediate Casing: Depending on wellbore conditions, a Cement nose guide shoe with self insert float collar on top of bottom joint and casing centralization with standard bow spring centralizers to optimize standoff. Two turbolating centralizers at the base of the Ojo Alamo are recommended.

### Wellhead

11" 3000 x 9 5/8" casing head. 11" 3000 x 7 1/16" Christmas Tree.

### Cementing

Surface Casing: 125 sks Std (class B) with 2.0 % CaCl<sub>2</sub> and ¼ #/sk Flocele (15.6 ppg, 1.18 ft<sup>3</sup>/sk 148 ft<sup>3</sup> of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test surface casing to 1000 psi for 30 min.

Intermediate Casing: Before cementing, circulate hole at least 1 ½ hole volumes of mud and reduce funnel viscosity to minimum to aide in hole cleanout. Depending on wellbore conditions, cement may consist of 550 sks 65/35 with 6.0 % Bentonite, 2.0 % CaCl<sub>2</sub>, 10 #/sk Gilsonite, and ½ #/sk Flocele (12.3 ppg, 1.96 ft<sup>3</sup>/sk) and a tail of 150 sks of Standard (Class B) cement with 5.0 #/sk Gilsonite, and ¼ #/sk Flocele (15.2ppg, 1.24 ft<sup>3</sup>/sk). (1264 ft<sup>3</sup> of slurry, 100 % excess to circulate to surface).

Production: un-cemented pre-drilled liner

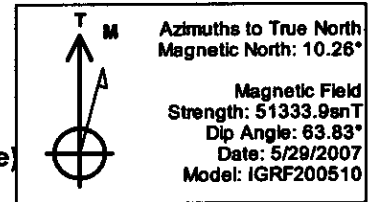
### Other Information

- 1) This well will be an open hole completion
- 2) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control. The production string may need to be cemented in multiple stages with a slurry design deviated from that listed above.
- 3) If high reservoir pressures or water flows are encountered slurry design may need to be deviated to from those listed above to satisfy wellbore and formation conditions.
- 4) No abnormal temperatures are anticipated. Anticipated BHP is 1600 psi.
- 5) This gas is dedicated.



**Project:** SJ BR, S14, T32N, R6W  
**Site:** Eul Canyon  
**Well:** San Juan 32-5 Unit Com #114  
**Wellbore:** Motherbore

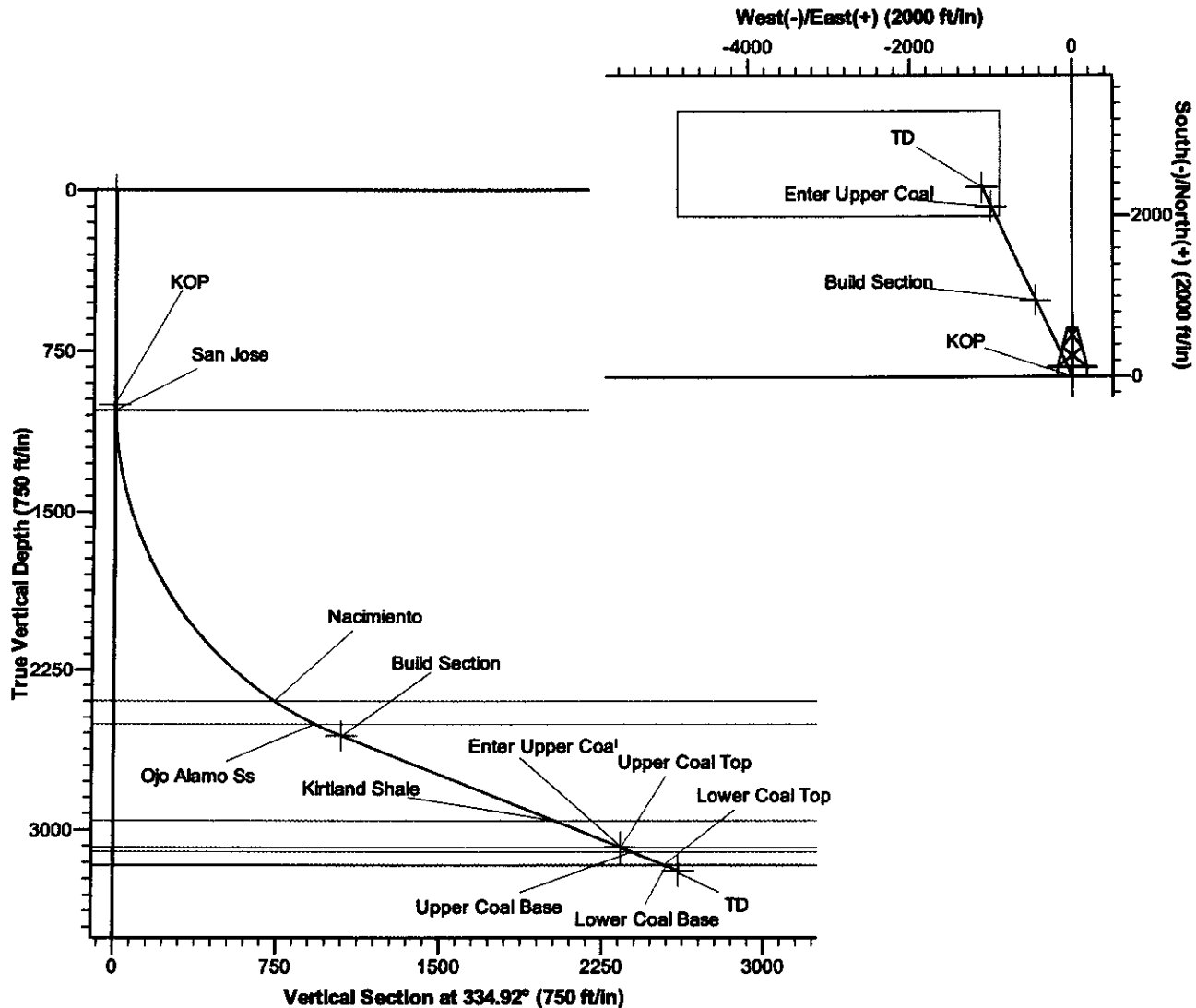
**Plan:** Preliminary Plan (San Juan 32-5 Unit Com #114/Motherbore)



PROJECT DETAILS: SJ BR, S14, T32N, R6W	
Geodetic System:	US State Plane 1927 (Exact solution)
Datum:	NAD 1927 (NADCON CONUS)
Ellipsoid:	Clarke 1866
Zone:	New Mexico Central 3002
System Datum: Mean Sea Level	

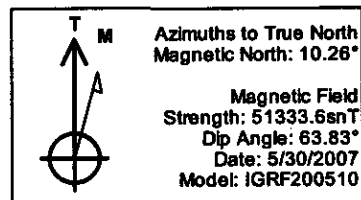
SURFACE LOCATION	
Easting:	159178.39
Northing:	2174196.38

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	KOP
3	3000.0	68.00	334.92	2562.5	954.5	-446.7	3.40	334.92	1053.9	Build Section
4	4386.9	68.00	334.92	3082.0	2119.2	-991.8	0.00	0.00	2339.8	Enter Upper Coal
5	4675.2	67.99	334.92	3190.0	2361.3	-1105.1	0.00	0.00	2607.1	TD





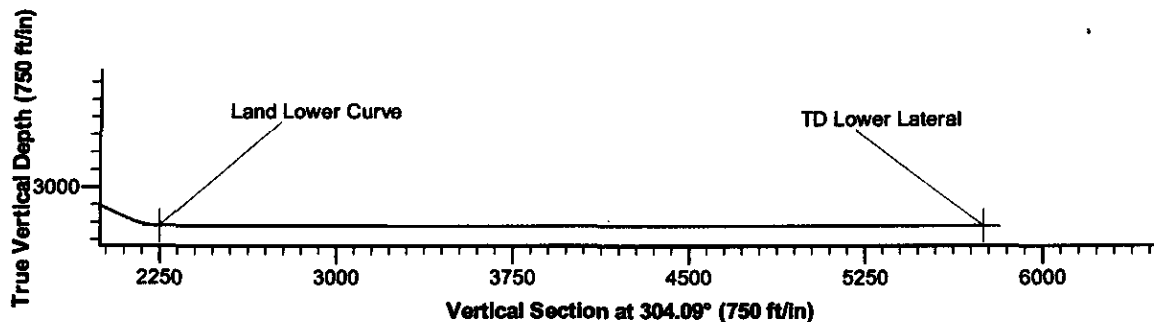
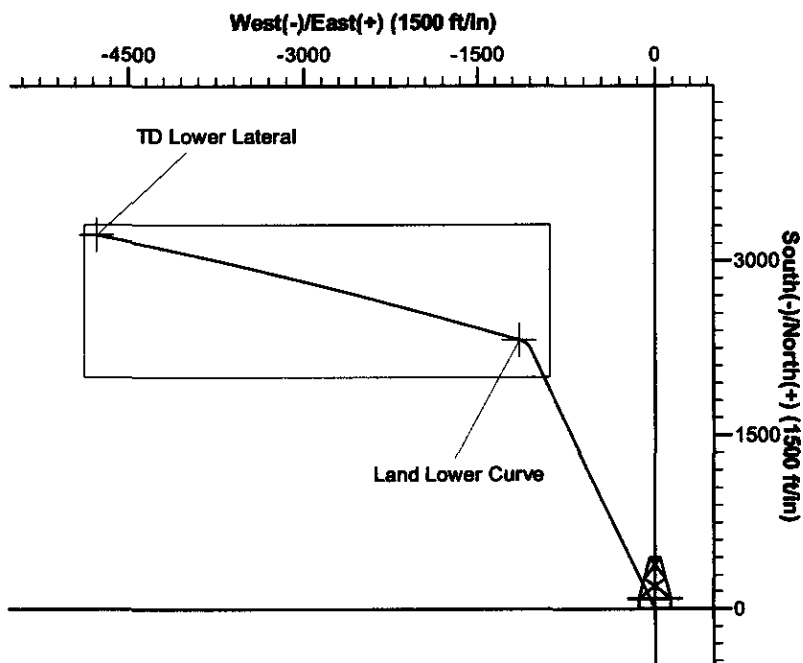
**Project:** SJ BR, S14, T32N, R6W  
**Site:** Eul Canyon  
**Well:** San Juan 32-5 Unit Com #114  
**Wellbore:** Lower Lateral  
**Plan:** Plan #1 (San Juan 32-5 Unit Com #114/Lower Lateral)



PROJECT DETAILS: SJ BR, S14, T32N, R6W	
Geodetic System:	US State Plane 1927 (Exact solution)
Datum:	NAD 1927 (NADCON CONUS)
Ellipsoid:	Clarke 1866
Zone:	New Mexico Central 3002
System Datum:	Mean Sea Level

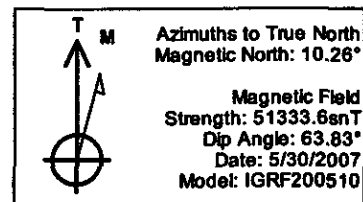
SURFACE LOCATION	
Easting:	159178.39
Northing:	2174196.38

SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target	
1	4533.8	68.01	334.92	3137.0	2242.6	-1049.5	0.00	0.00	2126.1		
2	4667.9	90.00	286.45	3164.0	2323.5	-1147.0	38.83	-71.65	2252.2	Land Lower Curve	
3	8397.7	90.00	281.54	3164.0	3225.0	-4765.0	0.13	-90.12	5753.8	TD Lower Lateral	





**Project:** SJ BR, S14, T32N, R6W  
**Site:** Eul Canyon  
**Well:** San Juan 32-5 Unit Com #114  
**Wellbore:** Upper Lateral  
**Plan:** Plan #1 (San Juan 32-5 Unit Com #114/Upper Lateral)



PROJECT DETAILS: SJ BR, S14, T32N, R6W	
Geodetic System:	US State Plane 1927 (Exact solution)
Datum:	NAD 1927 (NADCON CONUS)
Ellipsoid:	Clarke 1866
Zone:	New Mexico Central 3002
System Datum:	Mean Sea Level

SURFACE LOCATION	
Easting:	159178.39
Northing:	2174196.38

SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target	
1	4320.2	68.00	334.92	3057.0	2063.2	-965.6	0.00	0.00	1956.1	Land Upper Curve	
2	4493.4	89.91	286.76	3092.0	2168.1	-1091.2	29.88	-71.57	2118.9	Land Upper Curve	
3	8316.3	90.09	285.34	3092.0	3225.0	-4765.0	0.04	-82.64	5753.8	TD Upper Lateral	

