

DATE IN 3/17/08	SUSPENSE	ENGINEER W. Jones	LOGGED IN 3/17/08	TYPE DHC 4807	APP NO. PKR0807753953
--------------------	----------	----------------------	----------------------	---------------------	--------------------------

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
- [A] Location - Spacing Unit - Simultaneous Dedication
 NSL NSP SD
- Check One Only for [B] or [C]
- [B] Commingling - Storage - Measurement
 DHC CTB PLC PC OLS OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
 WFX PMX SWD IPI EOR PPR
- [D] Other: Specify _____
- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply
- [A] Working, Royalty or Overriding Royalty Interest Owners
- [B] Offset Operators, Leaseholders or Surface Owner
- [C] Application is One Which Requires Published Legal Notice
- [D] Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] Waivers are Attached

RECEIVED
 2008 MAR 17 PM 1 31

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

<u>Justin Stolworthy</u> Print or Type Name	 Signature	<u>DISTRICT ENGINEER</u> Title	<u>3-11-08</u> Date
		<u>jstolwor@energy.com</u> e-mail Address	



March 10, 2008

Mr. Mark E. Fesmire, P.E. - Director
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: Administrative Approval to Downhole Commingle
Energen Resources Corporation
Cullins Federal #5
2150' FNL, 2150' FEL, Section 04, T24N, R03W, NMPM
Rio Arriba County, New Mexico

Dear Mr. Fesmire:

Energen Resources Corporation requests administrative approval to downhole commingle the South Blanco Picture Cliffs and West Lindrith Gallup Dakota pools in the subject well. The well is currently producing with a Pump Jack, therefore, we'll continue to produce this well with a beam pump.

To comply with New Mexico Oil Conservation Rules, Energen Resources Corporation is submitting the following data for your approval of the proposed commingling.

1. C-107A - Application for Downhole Commingling
2. C-102 - Location plat showing each spacing unit and dedicated acreage
3. Offset Operator Ownership Plat
4. Allocation method

In accordance to New Mexico
Oil Conservation Division Rule 303C, Energen Resources will notify all Offset operators.

If additional information is needed, please contact me at 505-324-4143.

Sincerely,

A handwritten signature in black ink, appearing to read "Justin M. Stolworthy", written over a horizontal line.

Justin M. Stolworthy
District Engineer

xc:

NMOCD – Aztec District Office
BLM- FFO notified via Federal Sundry Notice 3160-5 and sent NMOCD form C-107A

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 October 12, 2005
 Submit to Appropriate District Office
 State Lease - 4 Copies
 Fee Lease - 3 Copies
 AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-24045		² Pool Code 39189		³ Pool Name W Lindrith Gallup Dakota	
⁴ Property Code 21899		⁵ Property Name Cullins Federal			⁶ Well Number 5
⁷ OGRID No. 162928		⁸ Operator Name Energen Resources Corporation			⁹ Elevation 7145'

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
G	4	24N	3W		2150'	North	2150'	East	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
¹² Dedicated Acres 160		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ 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.

	<p>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.</p> <p>_____ Signature</p> <p>3-11-08 Date</p> <p>Justin M. Stolworthy Printed Name</p>
	<p>18 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.</p> <p>On file _____ Date of Survey</p> <p>Signature and Seal of Professional Surveyor: _____</p> <p>_____ Certificate Number</p>

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 October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-24045		² Pool Code 72439		³ Pool Name South Blanco Picture Cliffs	
⁴ Property Code 21899		⁵ Property Name Cullins Federal			⁶ Well Number 5
⁷ OGRID No. 162928		⁸ Operator Name Energen Resources Corporation			⁹ Elevation 7145'

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
G	4	24N	3W		2150'	North	2150'	East	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
¹² Dedicated Acres 160		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ 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.

	<p>¹⁷ OPERATOR CERTIFICATION</p> <p><i>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.</i></p> <p>Signature: </p> <p>Date: 3-11-08</p> <p>Justin M. Stolworthy Printed Name</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p><i>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.</i></p> <p>On file _____</p> <p>Date of Survey _____</p> <p>Signature and Seal of Professional Surveyor: _____</p> <p>Certificate Number _____</p>

Allocation Method: Cullins Federal #5

Energen Resources plans on DHC the West Lindrith Gallup/ Dakota and the South Blanco Pictured Cliff.

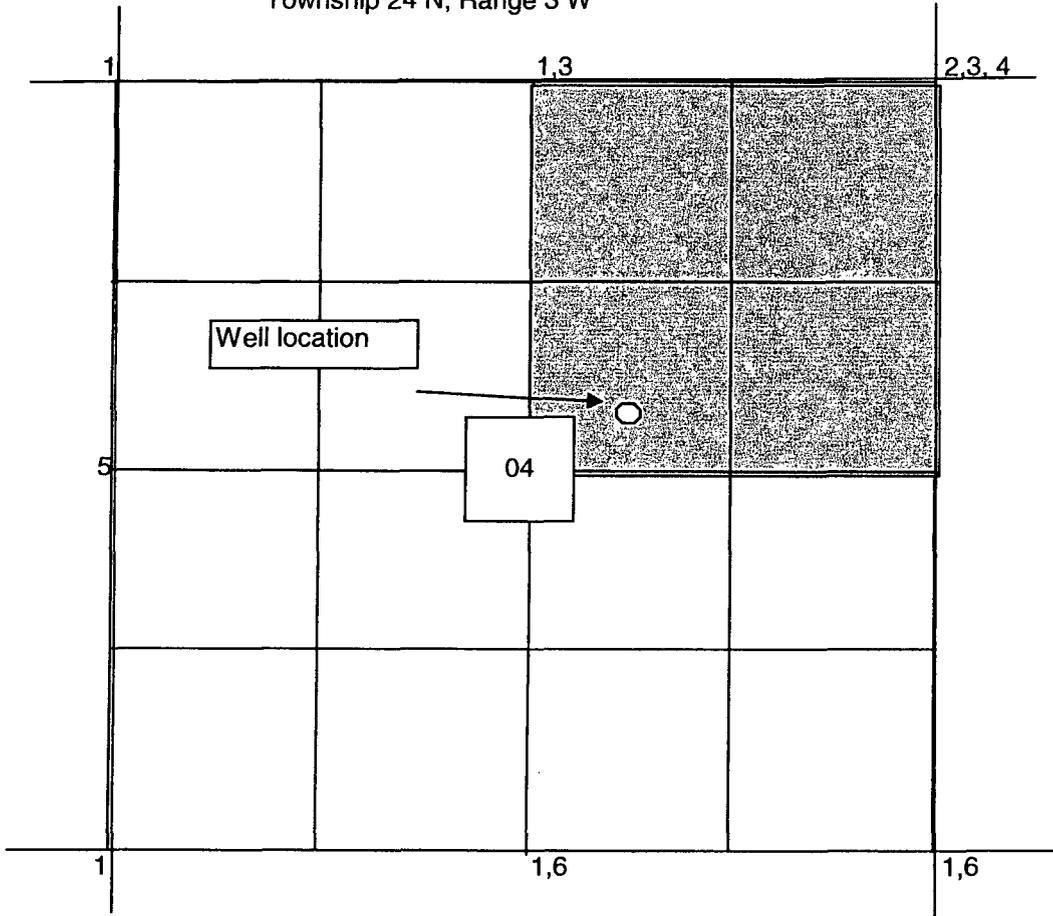
Pictured Cliff perforations: 3413' to 3493'
West Lindrith Gallup/ Dakota: 7684' to 7913'

Current rates:
PC – not yet completed
WLGD – 3.5 BOPD, 27 MCFD, & 0.7 BWPD

Recommended Allocation: Subtraction method following 60 days of stabilized production. Rates reported to NMOCD – Aztec for final determination.

Energen Resources Corp.
Cullins Federal #5
Offset Operator/ Ownership Plat
South Blanco Pictured Cliffs/ West Lindrith Gallup- Dakota
Downhole Commingling

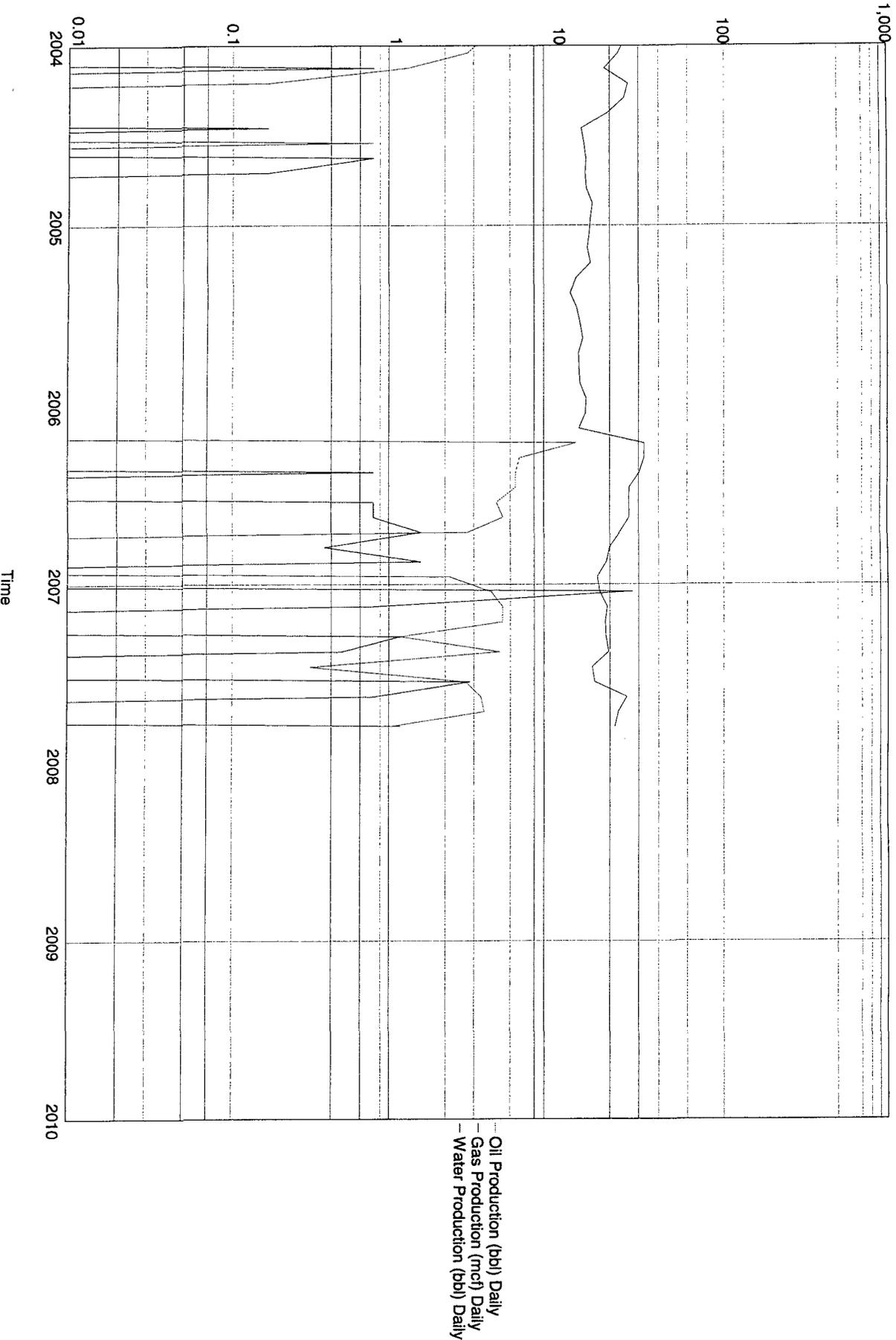
Township 24 N, Range 3 W



- 1) Energen Resources
- 2) Elm Ridge Exploration
- 3) Dugan Production
- 4) Schaik MR
- 5) Carolyn Clark Wiggin Oil Property
- 6) ConocoPhillips Company

Lease Name: CULLINS FEDERAL
County, State: RIO ARBA, NM
Operator: ENERGEN RESOURCES CORPORATION
Field: LINDRITH WEST
Reservoir: GALLUP DAKOTA
Location: 4 24N 3W SW SW NE

CULLINS FEDERAL - LINDRITH WEST 5 GALLUP /SD/ SH/



Production Rates

General Information

Company	20 - ENERGEN RESOURCES CORPORATION	Spud Date	07/15/1986
Well Name	3128895A - CULLINS FEDERAL 5 DK	Completion Date	11/01/1986
State	NM	Hookup Date	
County	RIO ARRIBA	Date of First Sales	
Area	ROCKY MOUNTAIN	Acct Term Date	
Field		Well Status	P - PRODUCING
Prospect	931001 - ACQ SAN JUAN	Payout Date	
Operator	ENERGEN RESOURCES CORPORATION	GWl	1.0000000
Primary Lease	931001 - ACQ SAN JUAN	NWl	0.8450000
Well Spot	24N 3W 4, SW/4NE/4 2150 FNL 2150 FEL	Co Roy	0.0000000
Horizon		Co ORRI	0.0000000
Total Depth (ft)	7,953	NRI	0.8450000
Primary Product	O - OIL		
API Number	30-039-24045		
Well Spacing			
Spacing Acres	100.000000		

Remarks

Obligation Remarks

Code	First Call	Frequency	Last Call	Last Review	Remarks
------	------------	-----------	-----------	-------------	---------

General Remarks

Code	First Call	Frequency	Last Call	Last Review	Remarks
------	------------	-----------	-----------	-------------	---------

AREV

AREV CONVERSION REMARKS
SURFACE COMMINGLED WITH CULLINS FEDERAL #2 28918A

DUEDIL

DUE DILIGENCE - INTEREST
2004-03-25 BHR 1997 BURLINGTON WELL CARD SHOWS GA DK INTEREST AS 100% WI 84.5% NRI IN ALL PRODUCTS, WITH NO PAYOUTS.

Lease Number	Lessor Name	Land Description
The primary lease is inactive		

[back to top](#)

Lease Number	Lessor Name	Land Description						
NM10007-00R	USA NM SF 080472	T24N, R3W, NMPM, SEC 4: ALL SEC 7: LOTS 1, 2, 3, 4, NE/4 SEC 8: NW/4 SURFACE TO BASE OF DAKOTA						
Tract Number	Lessor Decimal	Our WI	Gross Acres	Dev Gross Acres	Dev Net Acres	Dev Co Net Acres	ORRI Net Acres	Dev ORRI Net Acres
7692	1.00000000	1.00000000	640.0000	640.0000	640.0000	640.0000	0.0000	0.0000
43635	1.00000000	1.00000000	246.8400	246.8400	246.8400	246.8400	0.0000	0.0000
43636	1.00000000	1.00000000	160.0000	160.0000	160.0000	160.0000	0.0000	0.0000
		Total Acres:	1046.8400	1046.8400	1046.8400	1046.8400	0.0000	0.0000

[back to top](#)



General | Location | Tract/Lease | Additional | Date/Acquisition | Regulatory |

Company 20 ENERGEN RESOURCES CORPORAT Prospect ACQ SAN JUAN
 Well 3128895A CULLINS FEDERAL 5 DK Area ROCKY MOUNTAIN

Tracts	Tract Description	Net Acres	Co Net
7692	Horiz 24N 3W 4 ALL	640.0000	640.0000

Totals Net Acres 640.0000 Co Net 640.0000

Lease ID	Lease Name	Act	Prospect	Prospect Name
20*931001	ACQ SAN JUAN	G	931001	ACQ SAN JUAN
20*NM10007-00F	USA NM SF 080472	A	31037	SAN JUAN BASIN - BRC

Unit

Unit Tract No

Find



General | Location | Tract/Lease | Additional | Date/Acquisition | Regulatory

Company ENERGEN RESOURCES CORPORAT Prospect ACQ SAN JUAN
 Well CULLINS FEDERAL 5 DK Area ROCKY MOUNTAIN
 Well Name
 Production Lease ACQ SAN JUAN
 State
 County RIO ARRIBA
 Operator ENERGEN RESOURCES CORPORATION
 Cost Center CULLINS FEDERAL 5 DK
 Primary Product

Current Well Status

Date	Status	Description	Type
08/01/1998	P	PRODUCING	P
07/01/1998	SI	SHUT-IN	S
08/01/1997	P	PRODUCING	P

Current Well Interest

Payout	Eff Date	Gross WI	Net WI	Co. RI	Co. ORRI	Net RI	Act
NPO	11/01/1997	1.0000000	0.8450000	0.0000000	0.0000000	0.8450000	X

Acct Payout Status Acct Payout Date

Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Tuesday, April 08, 2008 11:13 AM
To: 'jstolwor@energen.com'
Cc: Warnell, Terry G, EMNRD; Brooks, David K., EMNRD; Ezeanyim, Richard, EMNRD
Subject: DHC application: Cullins Fed #5

Hello Justin:

Please email back your estimate of the reservoir pressure in the Pictured Cliffs and in the Gallup-Dakota and how you obtained these pressures.

Your C-107A states the perms begin at 3413 and end at 7913, so that is more than 150 percent - and requires an estimate of reservoir pressure.

I have your application ready to release, pending this info.

William V. Jones PE
New Mexico Oil Conservation Division
1220 South St. Francis
Santa Fe, NM 87505
505-476-3448

Pressure Test Report

COMPANY INFORMATION

Company Name ENERGEN RESOURCES
Representative JUSTIN STOLWORTHY
Phone
Fax
Address 2198 BLOOMFIELD HWY
FARMINGTON, NM 87401

E-Mail Address PHOENIXSERVICES@ZIANET.COM
Service Company PHOENIX SERVICES

WELL INFORMATION

Well Name JICARILLA 126S 1E
Well Location T24N, R1W, SEC 1
Field and Pool WEST LINDRITH GALLUP/DAKOTA
Status (Oil, Gas, Water, Injection) GAS
Perforated Intervals 7406-7618
Mid-point of Perforated Intervals (MPP)
Drilling Rig Number
Elevations
Kelly Bushing (KB) 12
Casing Flange (CF)
KB-CF
Ground Level
Plug Back Total Depth 7796
Total Depth 7820
Production Casing 4 1/2 TO 7796
Production Tubing 2 3/8 TO 7576

Handwritten notes: ≈ 1610 PS C

TEST INFORMATION

Type of Test GRADIENT/BUILDUP
Date(s) of Test 8/2/07-8/14/07
Dead-weight Gauge Tubing Pressure 1161
Dead-weight Gauge Casing Pressure 1080
Shut-in Date (Duration)

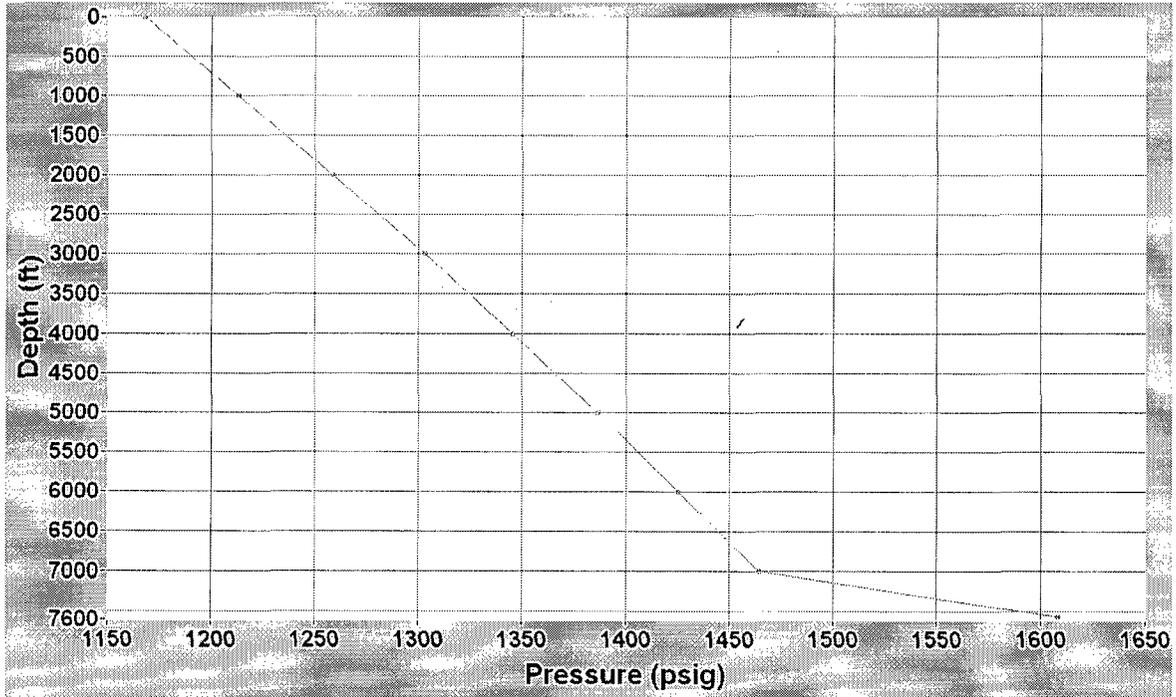


Company Name ENERGEN RESOURCES
Well Name JICARILLA 126S 1E
Type of Test GRADIENT/BUILDUP
Date(s) of Test 8/2/07-8/14/07

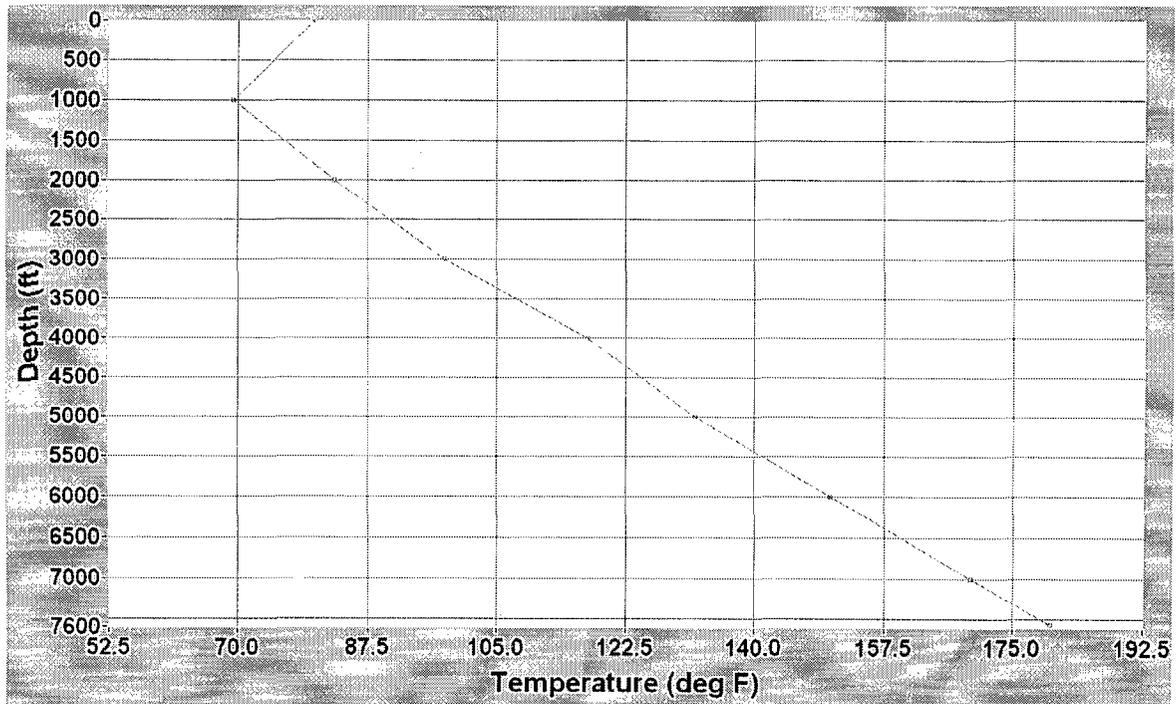


Probe Serial Number 5422

RIH Gradient Depth vs. Pressure



RIH Gradient Depth vs. Temperature



OIL COMPANY INFORMATION

Oil Company: ENERGEN RESOURCES
Address: FARMINGTON, NM

WELL INFORMATION

Well Name: LINDRITH 53
Well Location: T24N, R2W, SEC. 32
Field: *(circled)*
Pool: *(circled)*
Formation: PICTURED CLIFFS
Well Licence-Number:
Well Fluid Status: 02 Gas
Well Mode Status: 07 Standing(Drilled & Cased)
Well Type Status: 09 Industrial
Well Type Indicator: Vertical
Production Interval(KB) From: 3085 TO 3113
KB Elevation: CF Elevation: Ground Elevation:
Pool Datum: Datum Depth: 0
Producing Through:
O.H. Diameter:
Casing Liner Diameter:
PBSD: 3240
Total Depth: 3250
Tubing Depth:
Tubing OD.: 2 7/8
Casing OD.: Tubing ID.: Casing ID.:

(circled) 208 PSC

TEST INFORMATION

Type Of Test: Static Gradient
Initial Tubing Pressure: Final Tubing Pressure:
Initial Casing Pressure: Final Casing Pressure:
Shut in Time:

GAUGE INFORMATION

Serial Number: 5423
Pressure Range: 25600
Calibration Date: MAR 28/07
Gauge Started: Gauge Stopped:
On Bottom Time: 2/19/08 @ 0934 HRS Off Bottom Time: 3/20/08 @ 1039 HRS
Run Depth Bottom (KB):

REMARKS

2/19/08 - RU PRESSURE TRLR-RAN SINGLE BHP GAUGE (5423) W/WELL FLOWING TO 3211'-SHUT WELL IN-LEFT GAUGE IN FOR BUILDUP.
3/20/08 - POOH W/SINGLE BHP GAUGE FROM 3211' MAKING GRADIENT STOPS-RD PRESSURE TRLR.

GRADIENT SUMMARY

Oil Company: ENERGEN RESOURCES

Well Location: T24N, R2W, SEC. 32

#	Real Time	Depth	Stop Time	Temp.(DEG.F)	Pres.(PSIG)	Gradient
1	03/20/2008 09:39:00	0.0	1034 - 1039	61.415	150.5	0.000
2	03/20/2008 09:32:00	500.0	1027 - 1032	57.655	150.8	0.001
3	03/20/2008 09:24:30	1000.0	1021 - 1026	69.040	154.4	0.007
4	03/20/2008 09:18:00	1500.0	1015 - 1020	76.888	156.4	0.004
5	03/20/2008 09:12:30	2000.0	1009 - 1014	84.266	158.4	0.004
6	03/20/2008 09:06:30	2500.0	1003 - 1008	91.158	160.4	0.004
7	03/20/2008 08:52:30	3000.0	0949 - 0954	98.265	162.6	0.004
8	03/20/2008 08:45:30	3211.0	- 0948	103.244	208.2	0.216

FLUID LEVEL IS AT N/A