Office	State of New Mexico		Form C-103
District I ,	Energy, Minerals and Natural R	esources	May 27, 2004
1625 N. French Dr., Hobbs, NM 88240		V TITE TO W	WELL API NO.
<u>District II</u> 1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVATION DA	ISION L	30-007-20231
District III	1220 South St. Francis		o. Indicate Type of Lease
1000 Rio Brazos Rd., Aztec, NM 87410	Santa Fe, NM 87505		STATE FEE S
<u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM	Santa 1 C, 1111 07503	1 T 0 T004 6	. State Oil & Gas Lease No.
87505	On Co	NSUBVATIO	N.
SUNDRY NOTICES	AND REPORTS ON WELLS	IVISION 7	Lease Name or Unit Agreement Name
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DIFFERENT RESERVOIR. USE "APPLICATION PROPOSALS.)	IN FOR PERMIT" (FORM C-101) FOR SU	.н 	VPR D
1. Type of Well: Oil Well Gas	Well 🕅 Other COALBED ME	THANE 8	. Well Number 64
2. Name of Operator			O. OGRID Number 180514
•	RGY RATON, L.L.C.		. Solds Number 188817
3. Address of Operator		1	0. Pool name or Wildcat
PO BOX 190,	RATON, NM 87740		
4. Well Location			
Unit Letter O: 14 fe	eet from the <u>South</u> line an	1 1981	feet from the <u>East</u> line
***************************************	nship 31N Range 181		Colfax County
	Elevation (Show whether DR, RKE		County
	8652' (GR)	111, 011, 010.)	
Pit or Below-grade Tank Application or Clos			
Pit type Depth to Groundwater	Distance from nearest fresh water w	ell Distanc	ce from nearest surface water
		bbls; Const	
12. Check Appr	opriate Box to Indicate Nature	of Notice, Re	eport or Other Data
NOTICE OF INTER	ITION TO	CURCE	OUTNIT DEDODE OF.
	I		EQUENT REPORT OF:
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1. Describe proposed or completed of starting any proposed work). or recompletion. Work proposed ■ Drill a horizontal lateral in the U ■ The reserve pit will be dug in the I ■ Steel pits will be used for the die I ■ The primary drilling fluids will be start the "Clean Faze System" be of lime for a ph modifier. To he I Drilling fluid additives will be start the lateral is TD'd, a 3 ½" Whipstock will be retrieved. ■ A clean out run will be made to the I Drilling fluids will be diluted with steel pits will be washed and clear restored to original ground contours. I hereby certify that the information above grade tank has been/will be constructed or closed. SIGNATURE	operations. (Clearly state all pertin SEE RULE 1103. For Multiple Co is as follows. pper Vermejo coal at 1590'- 1597'. coriginal pit area for the drilling sol rilling fluids, and a shale shaker to represent the natural produced water. If hole coal y mixing a 5 to 6 lb per barrel of state carry drilling solids to surface, gapplied by Basin Fluids (Mike Atcherent for the original TVD. Production will be the clean production water and transfer and out in the reserve pit. The reserver. TITLE Production WMOCD guidelines , a general address	ent details, and gent details, and gent details, and gent details, and gent details. Attact des during details problems arch to the product will be added ison owner) from ff just outside the trun back to the erred to the VPR we pit will not be my knowledge at the detail permit or a detail permit o	ive pertinent dates, including estimated date h wellbore diagram of proposed completion g operations. g operations. g solids to the pit. c occur during drilling, we will need water. Adding about a 1/4 lb per barrel as a Viscosifier. In Bloomfield N.M. It is production casing. Original setting depth. It is a production casing. Original setting depth. It is a production to be a lined. The pit will be back filled and the lined. The pit will be back filled and the lined. The pit will be back filled and the lined. The pit will be back filled and the lined. The pit will be back filled and the lined. The pit will be back filled and the lined. The pit will be back filled and the lined. The pit will be back filled and the lined. The pit will be back filled and the lined. The pit will be back filled and the lined belief. I further certify that any pit or belowan (attached) alternative OCD-approved plan DATE 8/13/04 Telephone No.

CLEAN FAZE

BASIN FLUIDS Bloomfield, New Mexico

Product of Brazil

RISK: CAUTION! NUISANCE DUST. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.	RIESGO: ¡CUIDADO! POLVO MOLESTO. PUEDE CAUSAR LA IRRITACIÓN DE LOS OJOS, LA PIEL Y LAS VÍAS RESPIRATORIAS.
PRECAUTIONS: Avoid creating and breathing dust. Avoid contact with eyes, skin and clothing. Supply ventilation adequate to keep exposure below occupational exposure limits (PEL or OES) for nuisance dust. Wear an approved particulate respirator (N95 or P2) when exposure may exceed the limit.	PRECAUCIONES: Evitar generar y respirar polvo. Evitar el contacto con los ojos, la piel y la ropa. Suministrar la ventifación adecuada para mantener la exposición por debajo de los limites de exposición profesional (PEL o OES) para polvos molestos. Usar un respirador aprobado para particulados (N95 o P2) cuando la exposición puede exceder el límite.
FIRST-AID MEASURES:	PRIMEROS AUXILIOS:
EYES: Promptly wash eyes with lots of water while lifting the eye lids. Continue to rinse for as least 15 minutes. Get medical attention.	OJOS: Lavar inmediatamente los ojos con gran cantidad de agua, manteniendo los párpados abiertos. Seguir enjuagando durante por lo menos 15 minutos. Obtener atención médica.
INHALATION: Move to fresh air at once. Perform artificial respiration if breathing has stopped. Get medical attention.	INHALACIÓN: Desplazar inmediatamente la víctima al aire fresco. Administrar respiración artificial si la víctima deja de respirar. Obtener atención médica.
INGESTION: Drink water or milk to dilute. Do NOT induce vomiting unless directed to by a physician. Never give anything by mouth to an unconscious person. Get medical attention.	INGESTIÓN: Beber agua o leche para diluir. NO se debe inducir el vómito a menos que lo ordene un médico. No se debe administrar nada por la boca a una persona inconsciente. Obtener atención médica.
SKIN: Wash with soap and water. Remove contaminated clothing. Get medical attention if discomfort continues.	PIEL: Lavar con jabón y agua. Quitarse la ropa contaminada. Obtener atención médica si la molestia continúa.
For more information see the Material Safety Data Sheet.	Para más información consultar la Hoja de Datos de Seguridad sobre los Materiales (MSDS).

FOR INDUSTRIAL USE ONLY

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REACTIVITY 0 PERSONAL PROTECTION HEALTH 1 FLAMMABILITY

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To: Don Lankford From: Bill Ordemann Date: August 2, 2004

RE: VPR D-64 Horizontal Lateral Vermejo Park Ranch Colfax County, New Mexico

Authority is requested to drill a horizontal lateral in the Upper Vermejo coal in the VPR D-64 (1590-1597). This workover is projected to cost \$244,000 net to El Paso with an incremental production gain of 200 Mcfd. Attached please find an AFE for this workover.

CONCLUSIONS:

• Incremental gas production rate can be achieved from the Upper Vermejo coal in the VPR D-64 by drilling a horizontal lateral in the coal. The production rate on D 64 has declined exponentially from 900-300 Mcfd indicating a damaged coal. A horizontal lateral should bypass the suspected damage and restore the production rate this well has demonstrated it is capable of.

RECOMMENDATIONS:

Please find the attached AFE for a net of \$244,000 to El Paso's 100% working interest.

Economics (100% W.J. & 93% N.R.I.) Net Investment (M\$) 244 Est. Net Reserves (MMCFE) 542 EVA (\$/year) \$104,100-(\$244,000x.12)=\$74,800 Net Operating Profit \$104,100 (\$2.5/Mcf x 73000 Mcf/yr x .93 NRI x (1-.05625) x (1-.35)) Weighted Average Cost of Capital 12% estimated Capital Employed \$244,000 Undiscounted Payout (AFIT, years): 2.1 Development Cost (\$/Mcf) 0.45 95% ROR

DISCUSSION:

VPR D-64 was drilled and completed in the Lower, Middle and Upper Vermejo Coals during the Spring of 2001. This well was the first well frac'd with coil tubing on the Vermejo project. Sandwedge was added to the frac sand to prevent sand flowback. The well was pulled 5 times in the first year to change out pumps and cleanout the wellbore. The production rate is declining exponentially indicating potential damage to the coal. A coal response to stimulation usually includes a flat or inclining production profile during the first 3 years. The well has cumulative production of 513 MMcf and is currently producing from the Vermejo Coals at 295 Mcfd + 40 bwpd.

It is proposed to drill a horizontal lateral from the D-64 in the 7' Upper Vermejo coal N 2000' toward the D-37 which has a 7' U.V coal. We will drill up dip from the D-64 U.V. top @ 1590' toward the D-37 U.V. top @ 1282' allowing the produced water to move toward the D-64 wellbore. D-71 offsets D-64 ½ mile to the WNW and produces 850 Mcfd + 220 bwpd from the Vermejo Coals including a 6' thick U.V. coal. The Upper Vermejo coal correlates in this area and appears to be continuous. D-37 offsets D-64 3200' to the NW and was successfully recompleted February 2004 in the Upper Vermejo coal adding 100 Mcfd incremental production rate. The D-37 currently produces 430 Mcfd + 80 bwpd and the production rate is inclining.

Recompletion-Workover Project Economics

El Fasc Froduction Company					Well / Fro	· •	WORKOVER VPR D-64		
Field:				Location:		Se Sec. 30 T31N R18 E			
TVD:	TMD:		LAT DEV:	0	Co	. / Ph. ;	Coitax Co.	State:	NM
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is a request for fund PD and has inclined						PR D-64, VPR D-71 c MCF - 49 BWPD.	fiset well initally flow	ed 122 MCFPI	7 + 239
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e 2	100.0%	63 D%	100 0%	93 0%				ermeability):	100%
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METTROKE 20 LEINIY LIC

KB =GL GL = 8652Lease: VPRD 64 Tree: Independent 1500 psi head Fie<u>id</u>: VPR - Castlerock County: Colfax State: New Mexico 11" Hole 8 5/8", 24 ppf, J-55 ST&C @ 321' 2-14-01 Spud. Dring 11" hole to 330". Ran 8 5/8" osg to Cement w/ 100 sks 321'. Cmt w/100 sx. Circ 7 bbls cmt to pit. 2-16-01 Drl 7 7/8" hole to 2085'. 2-17-01 Ran 48 jts 5 1/2", 15.5#, WC-50, LT&C csg @ 2007' Cmt w/335 sx. Bump plug. Circ 10 bbts cement. 7 7/8" Hole 3-28-01 RU CU and ran bit & scraper to 2007'. 4-2-01 Fatterson ran bond log. TOC at surf. 4-23-01 Fert Stage 1: 1873-80' w/ 4 spf 28 holes Pmp 397 gals 7.5% HCL acid, 70 nitro toam w/ 57852 lbs of 16/30 mesh snd, total 17790 gal pmpd, ISIP 430 psi. Fert Stage 2: 1826-30' w/ 4 spf 16 holes Stage 5 1590-97' w/ 4 spt 28 holes Pmp 220 gals 7.5% HCL acid, 70 nitro Fmp 388 gals 7.5% HCL acid, 70 nitro foam w/ 40956 lbs of foam w/ 32987 lbs of 16/30 mesh 16/30 mesh sand at 8-10 bpm, total 11332 gal pumped, sand at 8-10 bpm, total 15260 gal pmpd, ISIP 575 psi.
Ferl Stage 3: 1791-94' w/ 4 spf 12 holes
Pmp 183 gals 7.5% HCL acid, 70 nitro ISIP 500 psi. fcam w/ 27062 lbs of 16/30 mesh Stage 4 1771-74' w/ 4 spf 12 holes sand at 8-10 bpm, total 8613 gal Fmp 175 gals 7.5% HCL acid, 70 nitro foam w/ 25043 lbs of pmpd, ISIP 750 psi. Fert Stage 4: 1771-74' w/ 4 spf 12 holes 16:30 mesh sand at 10 bpm, total 9660 gal Pmp 175 gals 7 5% HCL acid, 70 nitro foam w/ 25043 lbs of 16/30 mesh sand at 10 bpm, total 9660 gal pumped, ISIP 450 psi. Fert Stage 5: 1590-97" w/ 4 spt 28 holes Stage 3 1791-94' w/ 4 spf 12 holes Pmp388 gals 7.5% HCL acid, 70 nitro Fmp 183 gals 7.5% HCL acid, 70 nitro foam w/ 27062 lbs fcam w/ 40956 lbs of 16/30 mesh of 16/30 mesh sand at 8-10 bpm, total 6613 gal pmpd, sand at 8-10 bpm, total 11332 gal ISIP 750 psi. pumped, ISIP 500 psi. 5-12-01 RIH w/ 45 PCP 6-5-01 Stuck pump, Ran 65 PCP. Bailed 75' fill 6-22-01 Pmp stuck Ran 95 PCP. Bailed 87' fill. Stage 2 1826-30' w/ 4 spf 16 hole. 1-25-02 Stuck pump. Ran 1 1/2" IP. Install 57 PU. Bailed Pmp 220 gals 7.5% HCL acid, 70 nitro foam w/ 32987 lbs of 16/30 mesh sand at 6-10 bpm, total 15260 gal pmpd, (SIP 4-11-02 Pump stuck, Ran 11/2" IP. Eail 60' fill. 575 psi. 8-25-02 Bad pump. Ran 1 1/2" IP. Bail 36' fill. Stage 1 1873-80' w/ 4 spf 28 holes Pmp 397 gals 7.5% HCL acid, 70 nitro foam w/ 57852 lbs of 16/30 mesh sand, total 17790 gal pmpd, 1\$IP 430 psi. 5-1/2", 15.5 ppf, J-55, LT&C @ 2007'. Cement w/ 335 sks.

Prepared by: Date:

William M. Ordemann August 3, 2004

PBTD=2007

TD= 2085'



SAFETY DATA SHEET DUOVIS

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

PRODUCT NAME:

DUOVIS

SYNONYMS, TRADE NAMES:

Xanthan Gum

APPLICATIONS:

Viscosifier

SUPPLIER:

M-I Drilling Fluids UK Ltd.

Potra Quay,

Fooldes,

Aberdeen, AB11 5DQ Tel: 44 (0)1224 - 584336 Fax: 44 (0)1224 - 576119

EMERGENCY TELEPHONES:

001 281 561 1600 (USA)

2. COMPOSITION/INFORMATION ON INGREDIENTS

NAME CAS No.:

EINECS Nr.:

CLASSIFICATION

CONTENT

GLYOXAT

107-22-2

XI R-43, 36/38

<1 %

XANTHAN GUM 11138-66-2

85-95 %

WATER

7732-18-5

- Not classified.

5-15 %

The Full Text for all R-Phrases are Displayed in Section 16

COMPOSITION COMMENTS:

This product formulation is not classified as hazardous in accordance with the EU

Directives.

3. HAZARDS IDENTIFICATION

Not regarded as a health hazard under current legislation.

4. FIRST AID MEASURES

INHALATION:

Move the exposed person to fresh air at once. Get medical attention if any discomfort

continues.

1/4

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10273 - DUOVIS

INGESTION:

First aid is not normally required. Rinse mouth thoroughly, Drink plenty of water,

METIONIT MATERIAL

SKIN

Wash skin thoroughly with scap and water. Remove contaminated clothing. Get

medical attention if any discomfort continues.

EYES: Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention if any discomfort continues.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:

Carbon dioxide (CO2), Dry chemicals. Foam. Water apray, fog or mist.

SPECIAL FIRE FIGHTING

PROCEDURES:

Water spray may be used to flush spills away from exposures and dilute spills to non-flammable mixtures.

UNUSUAL FIRE & EXPLOSION

HAZARDS:

High concentrations of dust may form explosive mixture with sir.

HAZARDOUS COMBUSTION PRODUCTS:

Asphyxiating gases/vapors/tumes of: Carbon dloxide (CO2), Carbon monoxide (CO),

6. ACCIDENTAL RELEASE MEASURES

SPILL CLEANUP METHODS:

Collect in containers and seal securely. Flush clean with lots of water. Be aware of potential for surfaces to become slippery. Avoid generation and spreading of dust,

Wear necessary protective equipment.

7. HANDLING AND STORAGE

USAGE PRECAUTIONS:

Avoid handling which leads to dust formation. Provide good ventilation.

STORAGE PRECAUTIONS:

Store at moderate temperatures in dry, well ventilated area.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

INGREDIENT COMMENTS:

This material is considered a nulsance dust, OES TWA 4mg/m3 Respirable Dust, 10

mg/m3 Total Dust.

PROTECTIVE EQUIPMENT:







VENTILATION

Provide adequate general and local exhaust ventilation.

RESPIRATORS:

Respiratory protection must be used if air concentration exceeds acceptable level.

Dust filter P2 (for fine dust).

PROTECTIVE GLOVES:

No specific hand protection noted, but gloves may still be advisable. For prolonged or repeated skin contact use suitable protective gloves. Butyl rubber or polyvinyl acetate.

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EYE PROTECTION: Wear dust resistant safety goggles where there is danger of eye contact.

OTHER PROTECTION: Wear appropriate clothing to prevent repeated or prolonged skin contact. Provide

eyewash station.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:

ODOUR/TASTE:

Powder, dust.

COLOUR

Cream. Mild (or faint).

DENSITY/SPECIFIC GRAVITY (g/ml):

1,5

> 200

pH-VALUE, DILUTED SOLUTION: SOLUBILITY DESCRIPTION: Very soluble in water.

AUTO IGNITION TEMP. (°C):

Concentration %M:

Temperature (*C);

20

10. STABILITY AND REACTIVITY

STABILITY:

Normally stable.

CONDITIONS TO AVOID:

Not known.

MATERIALS TO AVOID:

Strong exidizing agents.

HAZARDOUS DECOMP. PRODUCTS:

Fire or high temperatures create: Asphyxiating gases/vapours/tumes of: Carbon dioxide (CO2). Carbon monoxide (CO).

11. TOXICOLOGICAL INFORMATION

Toxicological data Acute toxicity, LD60. Orat. Ret. > 5000 mg/kg

> Acute toxicity, LC50, 1 hour, Inhalation, Rat. > 21 mg/l Skin Irritation Draize Skin. Rabbit. Slight Irriteint Eye Irritation Draize Eye. Rabbit. Slight Irritant

Sensitization. Buehler Skin. Guinea pig. Not a sensitiser

INHALATION:

Dust may irritate respiratory system or lungs.

INGESTION:

May cause discomfort if swallowed.

SKIN:

Powder may irritate skin.

EYES:

Particles in the eyes may cause initiation, and smarting.

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION:

Not regarded as dangerous for the environment. OSPAR have defined this chemical as PLONOR.

BIO ACCUMULATION:

No bioaccumulation is expected.

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DEGRADABILITY:

Biodegrades.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS:

Recover and recipiem or recycle, if practical. Dispose of on site landfill area. Dispose of

in accordance with Local Authority requirements.

14. TRANSPORT INFORMATION

ROAD TRANSPORT NOTES:

Not Classified

RAIL TRANSPORT NOTES:

Not Classified.

SEA TRANSPORT NOTES: AIR TRANSPORT NOTES: Not Classified.

15. REGULATORY INFORMATION

RISK PHRASES:

Not dassified.

SAFETY PHRASES:

Not classified.

STATUTORY INSTRUMENTS:

Chemicals (Hazard Information and Packaging) Regulations. Control of Substances

Hazardous to Health.

16. OTHER INFORMATION

INFORMATION SOURCES:

Material Safety Data Shoet, Misc. manufacturers. Sax's Dangerous Properties of Industrial Materials, 9th ed., Lewis, R.J. Sr., (ed.), VNR, New York, New York, (1997).

ISSUED BY:

Sørah Glover

REVISION DATE:

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PRINTING DATE:

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R-PHRASES (Full Teach:

Not classified, R-43 May osuse sensitisation by skin contact, R-36/38 initiating to eyes and skin.

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DISCLAIMER:

MSDS furnished independent of product sale. While every effort has been made to accurately describe this product, some of the data are obtained from sources beyond our direct supervision. We cannot make any assertions as to its reliability or completeness; therefore, user may rely on it only at user's risk. We have made no effort to censor or conceal deleterious aspects of this product. Since we cannot anticipate or control the conditions under which this information and product may be used, we make no guarantee that the precautions we have suggested will be adequate for all individuals and/or situations. It is the obligation of each user of this product to comply with the requirements of all applicable laws regarding use and disposal of this product. Additional information will be furnished upon request to assist the user; however, no warranty, either expressed or implied, nor liability of any nature with respect to this product or to the data herein is made or incurred hereunder.

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