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Bonneville Fuels Corporation

A Subsidiary of Bonneville Pacific Corporation

May 17, 1997

Mr. Frank Chavez
District III Supervisor
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87401
Phone: (505) 334-6178

re: Scott E. Federal #15: Braden Head Gas Pressure

Dear Mr. Chavez:

RECENT HISTORY: BRADEN HEAD CASING PRESSURE:

On 5/14/97 during routine braden head testing at the following well:

Scott E. Federal #15:
Producing Fm.: Juana Lopez Fm.: 6136' to 6164'.
Dakota 'D' Fm.: 6592' to 6620'.
Unit 'N': GL Elev. @ 6,477'.
1120' FSL & 1520' FWL, Section 36, T.27N., R.11W. N.M.P.M.
San Juan County, New Mexico

The braden head casing pressure was noted to be 35 PSIG after a sub-surface (buried) valve was excavated and opened up. The well has apparently been shut-in on the braden head for a number of years. The braden head test was run for 1/2 hour with a strong blow of dry gas out of the braden head thruout. There was no indication of declining production casing or tubing pressure during the test - and NO INDICATION of a production casing leak. The braden head was shut-in after the test was completed - the braden head SIP was still 35 PSIG.

The following day I notified Errol Beecher with the BLM and Ernie Busch with the NMOCD of the problem and of BFC's need to gather additional data. Mr. Busch informed me that under Rule 404 of the NMOCD we could NOT vent more than 30 MCFD of this gas to the surface. I informed him that I was not sure of the rate from the braden head. Simple calculation convinced me that the gas in the annulus, at such a low pressure, could NOT pollute the Ojo Alamo Fm. aquifer @ 970' to 1110':

Maximum gas pressure (dry annulus) at 970' is 55 PSIG with a gas gradient @ .02 psi/ft.

Minimum hydrostatic pressure in the Ojo Alamo Formation at 970' is 210-420 PSIG with a fresh water hydrostatic gradient @ .2165 psi/ft. (50% of fresh water) to .433 psi/ft. (100% of the fresh water gradient).

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: SF078089

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA, Agreement Designation:

1. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.: Scott E. Fed. #15

2. Name of Operator: Bonneville Fuels Corporation

9. API Well No.: 3004524570

3. Address and Telephone No.: 1660 Lincoln, Suite 1800, Denver, CO 80264 (303) 863-1555

10. Field and Pool, or Exploratory Area: Basin Dakota

4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 1120' FSL, 1520' FWL Sec 36 T27N R11W

11. County or Parish, State: San Juan, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☐ Other _____	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Bonneville Fuels Corp. proposes to vent shallow gas charge from bradenhead annulus for 5 days as follows:
1.) To determine if gas charge is isolated and can be easily depleted.
2.) To determine if a casing leak or inter-wellbore communication exists between the Scott E. Federal #18 and the Scott E. Federal #15 wellbores.

If Bonneville Fuels determines that such shallow gas charge may be vented easily and without adverse effects then Bonneville Fuels requests permission to vent such gas to depleteion immediately.

Justification addressed in attached letter.

Verbal permission requested to commence venting ASAP.

RECEIVED
MAY 21 1997
OIL CON. DIV.
DIST. 3

14. I hereby certify that the foregoing is true and correct
Signed Allen L. Herrell Title Operations Engineer. Date 5/19/97

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, 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.

*See Instruction on Reverse Side

RECENT HISTORY: BRADEN HEAD GAS PRESSURE: Continued:

On 5/16/97 BFC checked the integrity of the wellhead w/ WSI & found the casing slip seal and the 'B' Section seal for the 4-1/2" production casing to be in good shape. Two gas samples were gathered at the wellhead, one from the production tubing (the tubing is hung open-ended in the well @ 6623' - no packer), and one from the braden head. Analysis of the samples was faxed to me on 5/16/97.

TWO WELLS SEPARATED BY 130' OCCUPY THE SAME PAD:

SCOTT E. FEDERAL #15: WELLBORE FACTS/HISTORY:
Unit 'N': GL Elev. @ 6,477'.
1120' FSL & 1520' FWL, Section 36, T.27N., R.11W. N.M.P.M.
San Juan County, New Mexico
Spud: 11/29/80
Cased: 12/15/80
Fractured: 1/19/81 (Gelled Water)
Acidized: 7/25/90 (Displace w/ Nitrogen under packer)
Acidized: 9/12/96 (2% KCl Water)
Completed: 4/3/81
Ojo Alamo: 970'-1110'.
Fruitland: 1526'-2015'.
Pictured Cliffs: 2015'-2250'.
TSTOC @ 3660'.
Producing Perfs:
Juana Lopez Fm.: 6136' to 6164'.
Dakota Fm.: 6592' to 6620'.

Surface Casing: 8-5/8" 24# J-55 8rd. ST&C: Surface to 552'.
Surface Cement: 400 sx. Class 'B' w/ 2% CaCl2 + 1/4#/sx. Flocele
Circ. 100 sx. to pit.
Production Casing: 4-1/2" 10.5# 8rd. ST&C: 6209' to 6712'.
4-1/2" 11.6# 8rd. ST&C: Surface to 6209'.
D.V. Tool @ 4614'.
1st Stage Cement: Lead w/ 650 sx. Class 'B' w/ add.
Tail w/ 200 sx. Class 'B' w/ add.
2nd Stage Cement: 100 sx. Gulf Mix w/ NO RETURNS.
Temp. Survey TOC @ 3660'.

SCOTT E. FEDERAL #18: WELLBORE FACTS/HISTORY:
Unit 'N': GL Elev. @ 6,473'.
990' FSL & 1520' FWL, Section 36, T.27N., R.11W. N.M.P.M.
San Juan County, New Mexico
Spud: 11/2/80
Cased: 11/8/80
Fractured: 11/24/80 (Pict. Cliffs: **Nitrogen Foam Frac).**
P.C. Perfs. @ 2012' to 2028'.
Completed: 1/15/81
Abandoned: 10/15/92 Cement Retainer @ 2010'.
Fractured: 10/16/92 (Fruit. Coal: **Nitrogen Foam Frac).**
Coal Perfs. @ 1808' to 2000':OA).
Completed: 11/18/92.

Surface Casing: 7" 23# N-80 8rd. LT&C: Surface to 84'.
Surface Cement: 50 sx. Class 'B' w/ 3% CaCl2
Circ. 10 sx. to pit.
Production Casing: 2-7/8" 6.5# 8rd. EUE: Surface to 2098'.
Production Cement: Lead w/ 200 sx. Class 'B' Lite w/ add.
Tail w/ 175 sx. Class 'B' w/ add.
Circ. 15 sx. to pit.

DISCUSSION OF WELLS:

These two wells were drilled about the same time and ONLY the SEF #18 was fractured with a Nitrogen Foam (twice). THE GAS SAMPLE THAT WAS PULLED FROM THE BRADEN HEAD CONTAINED 57.689% NITROGEN. Clearly, the gas in the annulus on the SEF #15 is **remnant** from one of the two frac jobs on the SEF #18.

GAS ANALYSIS:

	SEF#18 P.C.	SEF#18 F.C.	SEF#18 F.C.	SEF#15 DAKOTA	SEF#15 B-HD.	SEF#15 B-HD. Norm.
	9/25/84	10/27/92	1/29/97	5/16/97	5/16/97	
	%	%	%	%	%	%
N2	1.099	12.581	0.700	0.865	57.689	0.865
CO2	0.560	0.129	0.140	0.819	0.001	0.819
Methane	87.930	85.989	96.900	77.493	35.031	81.406
Ethane	5.550	1.047	1.540	11.123	3.966	9.212
Propane	2.706	0.168	0.370	5.667	1.836	4.267
i-Butane	0.643	0.052	0.090	0.733	0.279	0.649
n-Butane	0.677	0.012	0.080	1.660	0.461	1.072
i-Pentane	0.294	0.007	0.040	0.494	0.159	0.374
n-Pentane	0.189	0.002	0.030	0.474	0.098	0.226
Hexanes +	0.384	0.013	0.110	0.672	0.480	1.110
	100.032		100.000	100.000	100.000	100.000
Sp. Gr.	0.6569	0.6161	0.5770	0.7480	0.8586	
BTU	1140.3	898.0	1016.9	1281.1	521.8	

CONCLUSIONS BASED ON THE GAS ANALYSIS:

From the gas analysis above it is evident that the un-normalized braden head gas sample is remnant gas from one of the two Nitrogen foam fracs conducted at the SEF #18 in 1980 or in 1992. Normalization of the braden head gas analysis WITHOUT the Nitrogen to a Dakota Gas is not successful as the gas Methane/Ethane/Propane/Butane+ corresponds as well with a P.C. composition as it does with a Dakota composition. The fact that the Nitrogen has not bled off or been produced indicates:

1. During a frac job on the SEF #18 well a fracture was created (temporarily?) which charged up the SEF #15 annulus, or a shallow formation in the vicinity of that annulus.
2. This gas charge has not bled off to production at the SEF #18 in either the Pictured Cliffs or the Fruitland Coal indicating a tenuous/temporary connection in the treatment itself.
3. Given the low BTU content of this gas at the braden head it is NOT an economic resource - in fact it is probably an isolated artifact of one of the two frac jobs and can be blown down.

The uncemented Pictured Cliffs/Fruitland Fms. and shallower zones in the SEF #15 wellbore offer a likely conduit of gas (Nitrogen and displaced hydrocarbons ahead of the Nitrogen frac gas) from the frac jobs at the SEF #18 to the annulus in the SEF #15. The low surface pressure seems to indicate that a zone shallower than the Ojo Alamo got charged up in one of the two fracture treatments at the SEF #18 well.

I AM OF THE OPINION THAT WE MAY BE ABLE TO ABATE THIS PROBLEM BY VENTING THIS NON-FLAMMABLE SHALLOW GAS CHARGE TO THE ATMOSPHERE.

REQUESTED COURSE OF ACTION:

Bonneville Fuels is interested in RESOLVING this braden head gas pressure problem as soon as possible/practical. BFC has acted expeditiously and carefully to determine the source of the braden head gas charge. BFC is of the opinion that NO CASING LEAK in the SEF #15 wellbore is causing this gas charge.

I would appreciate your verbal approval and permission to vent braden-head gas for up to 5 days, or until shallow gas charge depletion (if pressures indicate such depletion is occurring). During this period the producing and venting well pressures will be monitored daily (at both the SEF #15 & SEF #18 wells), and additional samples may be taken to determine if depletion is (as suspected) occurring - or if a casing leak or inter-wellbore communication is occurring.

IF, AT ANY TIME DURING THIS VENTING OPERATION, IT IS EVIDENT THAT THE SHALLOW GAS CHARGE IS NOT DEPLETING THEN THE BRADEN HEAD WILL BE SHUT-IN AND FURTHER REMEDIAL ACTIONS WILL BE INVESTIGATED. Such venting ONLY to commence as soon as Sundry Notice of venting plan approved AND verbal approval received for such operations from BOTH the Bureau of Land Management and the State of New Mexico.

The venting and tankage site will be approx. 100' west of the wellhead (+125' from the separator/compressor) and NO SMOKING signage will be posted. The tank will be set temporarily in case any fluids are carried while the SEF #15 braden head annulus is blown down. This approval will minimize unnecessary loss of resource, expenditures, and potential sub-surface pollution.

ADDITIONAL CONSIDERATIONS:

BFC will act expeditiously to cure this problem. BFC is unsure of several title/ownership interest issues in regard to zones at various depths in the SEF #15 wellbore. Should there be a casing leak or inter-wellbore communication with the SEF #18 wellbore, then a period of 30 to 60 days will be required to define ownership interests in the various zones, put together a work plan, circulate an AFE, and obtain a rig to commence necessary P&A or remedial operations.

It is my sincere belief that venting this shallow gas charge will cure the problem in an economic fashion and that further remedial work will NOT be necessary. The SEF #15 and the SEF #18 wells have never recovered their drilling, completion, and recompletion costs in gas production sales. Unnecessary expenditures may lead to the premature abandonment of gas reserves in the Dakota, Pictured Cliffs and Fruitland Coal Formations which might otherwise be recovered by these wellbores. CALL ME AT YOUR EARLIEST CONVENIENCE AT (303) 863-1555 ext. 213
IF YOU HAVE ANY QUESTIONS OR IF YOU ARE GRANTING VERBAL APPROVAL TO ATTEMPT TO BLOW DOWN THE SHALLOW GAS CHARGE.

Sincerely yours,
BONNEVILLE FUELS CORPORATION

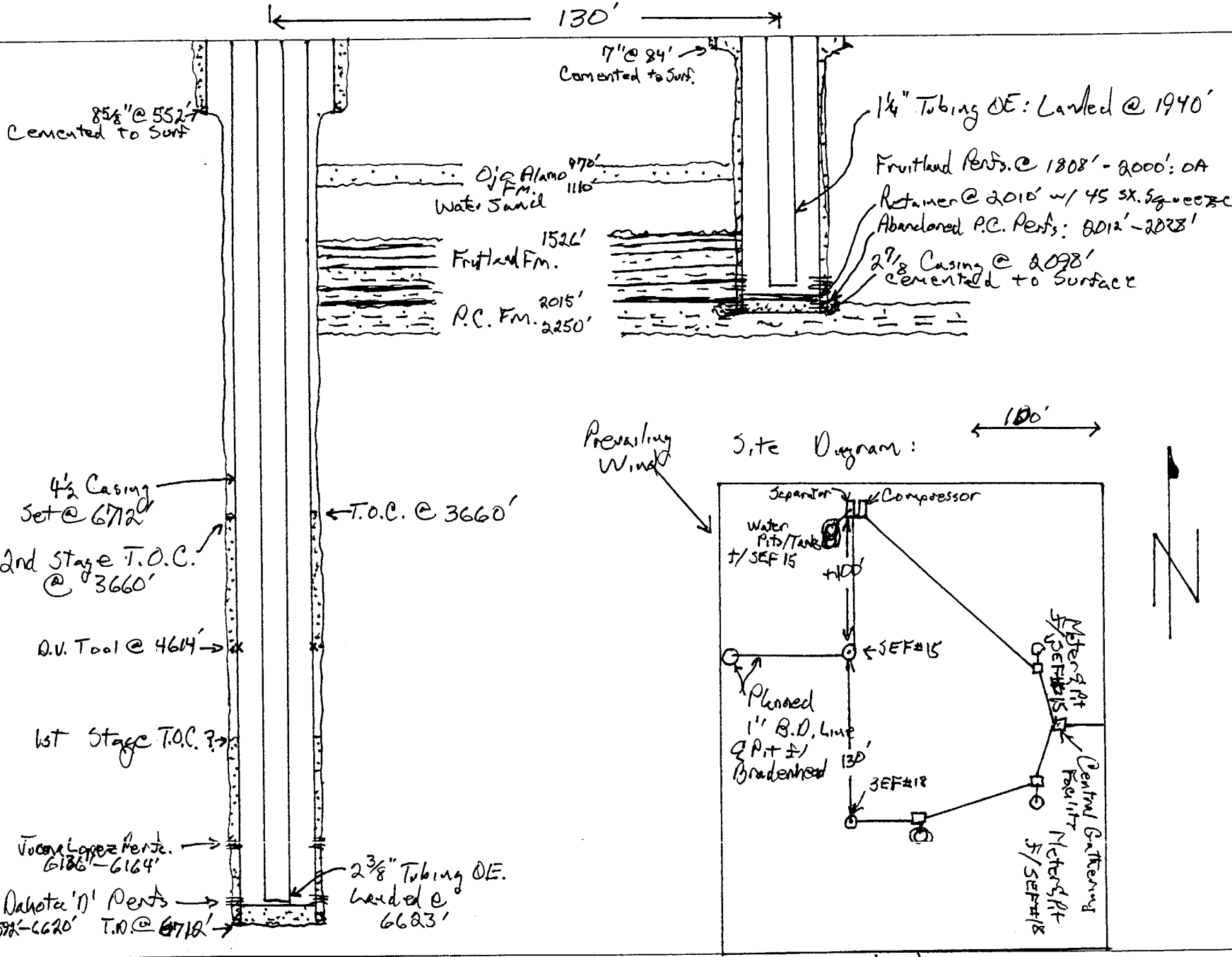
R. A. Schwering, P.E.
Operations Manager: New Mexico

Attachment: Sundry Notice
Well Bore Schematics and Site Diagram
Copies of Gas Sample Analyses

Scott E. Federal #15
Scott E. Federal #18 | Well Bore Schematics | Section 36, T. 27N., R. 11W. San Juan Co., New Mexico

S.E.F. #15 : 1120' FSL & 1520' FWL

SEF #18 : 990' FSL & 1520' FWL



GAS ANALYSIS SERVICE

2030 Afton Place
Farmington, N.M. 87401
(505) 325-6622

Analysis No. BVF70002
Cust. No. 15300-10045

WELL/LEASE INFORMATION

Company	: BONNEVILLE FUELS CORP.	Source	: BRADENHEAD
Well Name	: SCOTT E FED 15	Pressure	: 35 PSIG
County	: SAN JUAN	Sample Temp.	: N/A DEG.F
State	: NM	Well Flowing	: YES
Location	:	Date Sampled	: 05/15/97
Fld/Formation	: DAKOTA	Sampled By	: REX LANCASTER
Cust.Stn.No.	:	Foreman/Engr	:

Remarks:

ANALYSIS

COMPONENT	MOLE %	GPM**	B.T.U.*	SP.GR.*
NITROGEN	57.689	0.0000	0.00	0.5580
CO2	0.001	0.0000	0.00	0.0000
METHANE	35.031	0.0000	354.62	0.1940
ETHANE	3.966	1.0609	70.35	0.0412
PROPANE	1.836	0.5060	46.30	0.0280
I-BUTANE	0.279	0.0913	9.09	0.0056
N-BUTANE	0.461	0.1454	15.07	0.0093
I-PENTANE	0.159	0.0582	6.38	0.0040
N-PENTANE	0.098	0.0355	3.94	0.0024
HEXANES	0.480	0.2094	24.68	0.0154
TOTAL	100.000	2.1067	530.43	0.8579

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
** @ 14.730 & 60 DEG. F

COMPRESSIBILITY FACTOR	(1/Z)	1.0012
BTU/CU.FT. (DRY) CORRECTED FOR	(1/Z)	531.1
BTU/CU.FT. (WET) CORRECTED FOR	(1/Z)	521.8
REAL SPECIFIC GRAVITY		0.8586

ANALYSIS RUN AT 14.730 PSIA & 60 DEGREES F

CYLINDER #	: A092
CYLINDER PRESSURE	: 16 PSIG
DATE RUN	: 05/16/97
ANALYSIS RUN BY	: DAVE MARTIN

GAS ANALYSIS SERVICE

2030 Afton Place
Farmington, N.M. 87401
(505) 325-6622

Analysis No. BVF70003
Cust. No. 15300-10050

WELL/LEASE INFORMATION

Company	: BONNEVILLE FUELS CORP.	Source	: CASING
Well Name	: SCOTT E FED 15	Pressure	: 150 PSIG
County	: SAN JUAN	Sample Temp.	: N/A DEG.F
State	: NM	Well Flowing	: YES
Location	:	Date Sampled	: 05/15/97
Fld/Formation	: DAKOTA	Sampled By	: REX LANCASTER
Cust.Stn.No.	:	Foreman/Engr	:

Remarks:

ANALYSIS

COMPONENT	MOLE %	GPM**	B.T.U.*	SP.GR.*
NITROGEN	0.865	0.0000	0.00	0.0084
CO2	0.819	0.0000	0.00	0.0124
METHANE	77.493	0.0000	784.46	0.4292
ETHANE	11.123	2.9754	197.29	0.1155
PROPANE	5.667	1.5618	142.92	0.0863
I-BUTANE	0.733	0.2398	23.89	0.0147
N-BUTANE	1.660	0.5234	54.28	0.0333
I-PENTANE	0.494	0.1808	19.81	0.0123
N-PENTANE	0.474	0.1717	19.05	0.0118
HEXANES	0.672	0.2931	34.55	0.0216
TOTAL	100.000	5.9460	1276.24	0.7455

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
** @ 14.730 & 60 DEG. F

COMPRESSIBILITY FACTOR (1/Z)	1.0038
BTU/CU.FT. (DRY) CORRECTED FOR (1/Z)	1281.1
BTU/CU.FT. (WET) CORRECTED FOR (1/Z)	1258.8
REAL SPECIFIC GRAVITY	0.7480

ANALYSIS RUN AT 14.730 PSIA & 60 DEGREES F

CYLINDER #	: 036
CYLINDER PRESSURE	: 109 PSIG
DATE RUN	: 05/16/97
ANALYSIS RUN BY	: DAVE MARTIN

7/24/98

GAS ANALYSIS SERVICE

5/16/97

BONNEVILLE FUELS CORPORATION
WELL ANALYSIS COMPARISON

WELL NAME: SCOTT E FED 15

	BRADENHEAD	CASING
ANALYSIS NO.:	BVF70002	BVF70003
DATE:	5/15/97	5/15/97
COMPONENT	MOLE %	MOLE %
NITROGEN	57.689	0.865
CO2	0.001	0.819
METHANE	35.031	77.493
ETHANE	3.966	11.123
PROPANE	1.836	5.667
I-BUTANE	0.279	0.733
N-BUTANE	0.461	1.660
I-PENTANE	0.159	0.494
N-PENTANE	0.098	0.474
HEXANE +	0.480	0.672
BTU'S	531.1	1281.1
GPM	2.1067	5.9460
SPEC. GRAV.	0.8586	0.7480

Williams Field Services
Salt Lake City, Utah
CERTIFICATE OF ANALYSIS
for 02/97

Station ID: 37278
Station Name: SCOTT E FEDERAL #18
Analysis Source: 37278

Operator: 000766
Analysis ID: 178024
Analyzed Date: ??/??/??

Lab Indentifier:
Effective Date: 01/29/97

Sample On Date: ??/??/??
Sample Off Date: ??/??/??
Sample Type: C

Component	Mol %	GPM
Helium	0.0000	
CO	0.0000	
CO2	0.1400	
N2	0.7000	
Methane (C1)	96.9000	
Ethane (C2)	1.5400	0.412
Propane (C3)	0.3700	0.102
I-butane (IC4)	0.0900	0.029
N-butane (NC4)	0.0800	0.025
I-pentane (IC5)	0.0400	0.015
N-pentane (NC5)	0.0300	0.011
Hexanes (C6)	0.1100	0.048
Heptanes (C7)		
TOTAL	100.0000	0.642

Calculation Parameters:

Specific Gravity @ 60 deg.F (AIR=1)
Sample Gravity: 0.5770
Z Factor: 0.9979

BTU Calculated/cubic ft @ 60 deg.F
Dry BTU @ 14.730: 1034.0000
Wet BTU @ 14.730: 1016.8838

Remark:

GAS ANALYSIS SERVICE

RECD DEC 11 1992

WELL ANALYSIS COMPARISON

LEASE: SCOTT "E" FED COM 18 DECEMBER 7, 1992

DATE:	10/27/92	11/6/92	12/7/92
NO.:	20001	20003	20012
	MOLE %	MOLE %	MOLE %
NITROGEN	12.581	7.882	3.259
CO2	0.129	0.315	0.336
METHANE	85.989	90.016	94.632
ETHANE	1.047	1.396	1.390
PROPANE	0.168	0.236	0.225
I-BUTANE	0.052	0.068	0.067
N-BUTANE	0.012	0.029	0.024
I-PENTANE	0.007	0.015	0.012
N-PENTANE	0.002	0.007	0.006
HEXANE+	0.013	0.036	0.049
BTU'S	898.0	949.6	996.5
GPM	0.3561	0.4936	0.4913
SPEC GRAV	0.6161	0.6023	0.5834

GAS COMPANY OF NEW MEXICO
REPORT OF BTU TEST RESULTS

TO: GULF OIL CORP - U S (326)

REF: E SCOTT FED 18
4994
NORTHWEST NEW MEXICO (70)

DATE OF THIS TEST: 9/25/84
DATE OF LAST TEST: 11/08/83
TEST FREQUENCY: NOT SPECIFIED

RESULTS: SPECIFIC GRAVITY: 0.6569
BTU/CF @ 14.73/60F/DRY: 1140.3

	MOL %	G.P.M.
CARBON DIOXIDE	0.560	0.0000
NITROGEN	1.099	0.0000
METHANE	87.930	0.0000
ETHANE	5.550	1.4840
PROPANE	2.706	0.7450
ISOBUTANE	0.643	0.2100
N-BUTANE	0.677	0.2130
ISOPENTANE	0.294	0.1070
N-PENTANE	0.189	0.0680
HEXANE +	0.384	0.1570
TOTAL	100.032	2.9840

Frac
11/24/80