

DATE IN 3/3/97	SUSPENSE 3/24/97	ENGINEER BS	LOGGED KV	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
 [DD-Directional Drilling] [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 - Directional Drilling

☐ NSL ☐ NSP ☐ DD ☐ SD

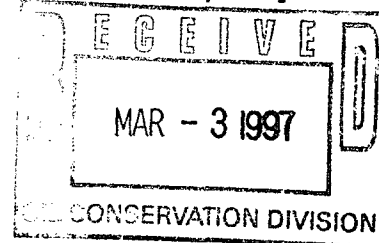
Check One Only for [B] and [C]

[B] Commingling - Storage - Measurement

☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR



[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

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Peggy Bradfield

Print or Type Name

Signature

Regulatory/Compliance Administrator

Title

Date

2-27-97

BURLINGTON RESOURCES

SAN JUAN DIVISION

February 20, 1997

SENT FEDERAL EXPRESS

Mr. William LeMay
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Re: Shaw #1A
955'FNL, 1190'FWL Section 13, T-30-N, R-9-W, San Juan County, NM
API #30-045-21658

Dear Mr. LeMay:

This is a request for administrative approval for downhole commingling the Blanco Pictured Cliffs and Blanco Mesa Verde in the subject well. This well was originally drilled as a Pictured Cliffs/Mesa Verde dual; it is intended to commingle.

To comply with the New Mexico Oil Conservation Division rules, Burlington Resources Oil & Gas is submitting the following for your approval of this commingling:

1. Form C107A - Application for Downhole Commingling;
2. C-102 plat for each zone showing its spacing unit and acreage dedication;
3. Production curve for Pictured Cliffs and Mesa Verde for at least one year;
4. Notification list of offset operators;
5. Shut in wellhead pressure and calculated down hole pressure;
6. Nine-section plats for the Mesa Verde and Pictured Cliffs

We will consult with the Supervisor of the Aztec District Office of the New Mexico Oil Conservation Division to establish an allocation formula.

Please let me know if you require additional data.

Sincerely,



Peggy Bradfield
Regulatory/Compliance Administrator
encs.
xc: Bureau of Land Management

DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II

811 South First St., Artesia, NM 88210-2835

DISTRICT III

1000 Rio Brazos Rd, Aztec, NM 87410-1693

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429Form C-107-A
New 3-12-96

APPROVAL PROCESS :

☒ Administrative ☐ Hearing

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE

☒ YES ☐ NOBurlington Resources Oil & Gas Company
87499

PO Box 4289, Farmington, NM

Operator

Shaw

Address

1A

D 13-30-9

San Juan

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7503 API NO. 30-045-21658 Federal ☒ State ☐ (and/or) Fee ☐

The following facts are submitted in support of downhole commingling.	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Blanco Pictured Cliffs - 72359		Blanco Mesaverde - 72319
2. Top and Bottom of Pay Section (Perforations)	2647-2693'		4296-5159'
3. Type of production (Oil or Gas)	gas		gas
4. Method of Production (Flowing or Artificial Lift)	flowing		flowing
5. Bottomhole Pressure	(Current) a. 388 psi (see attachment)	a.	a. 322 psi (see attachment)
Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(Original) b. 664 psi (see attachment)	b.	b. 695 psi (see attachment)
6. Oil Gravity ($^{\circ}$ API) or Gas BTU Content	BTU 1150		BTU 1140
7. Producing or Shut-In?	producing		producing
Production Marginal? (yes or no)	yes		yes
* If Shut-In and oil/gas/water rates of last production	Date: n/a Rates:	Date: Rates:	Date: n/a Rates:
Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data			
* If Producing, give data and oil/gas/water of recent test (within 60 days)	Date: 12-96 Rates: 21 mcf/d; 0 bopd	Date: Rates:	Date: 12-96 Rates: 10 mcf/d; 0 bopd
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Oil: % Gas: % will be supplied upon completion	Oil: % Gas: %	Oil: % Gas: % will be supplied upon completion

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? ☒ Yes ☐ NoIf not, have all working, overriding, and royalty interests been notified by certified mail? ☐ Yes ☐ NoHave all offset operators been given written notice of the proposed downhole commingling? ☒ Yes ☐ No11. Will cross-flow occur? ☒ Yes ☐ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ☒ Yes ☐ No (If No, attach explanation)12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ☐ No13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☒ Yes ☐ No

15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). _____

16. ATTACHMENTS:

- * C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- * Production curve for each zone for at least one year. (If not available, attach explanation.)
- * For zones with no production history, estimated production rates and supporting data.
- * Data to support allocation method or formula.
- * Notification list of all offset operators.
- * Notification list of working, overriding, and royalty interests for uncommon interest cases.
- * Any additional statements, data, or documents required to support commingling.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Mary Ellen Lutey TITLE Production Engineer DATE 2/17/97TYPE OR PRINT NAME Mary Ellen Lutey TELEPHONE NO. (505) 326-9700

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-4-65

All distances must be from the outer boundaries of the Section

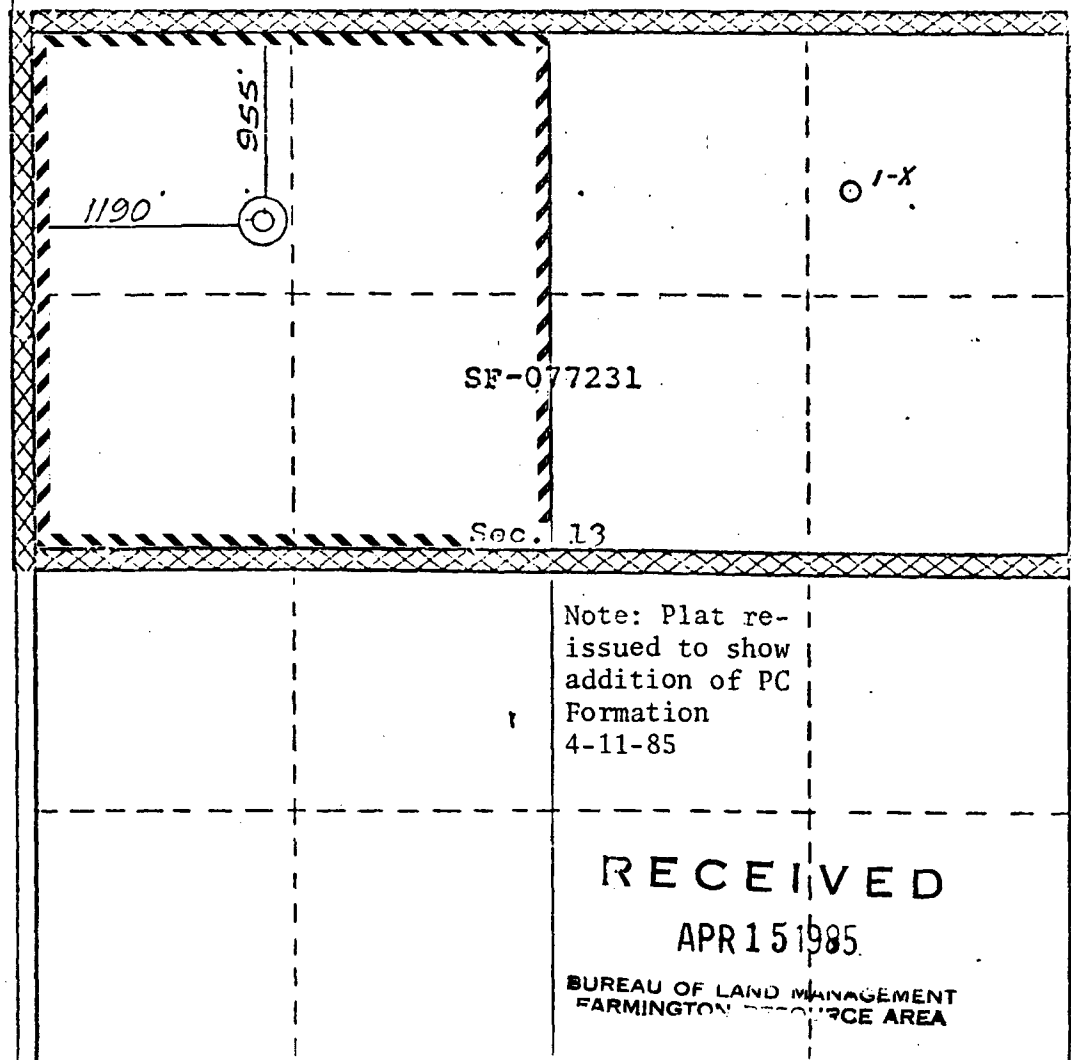
Operator EL PASO NATURAL GAS COMPANY		Lease SHAW (SF-077231)		Well No. 1 A
Unit Letter D	Section 13	Township 30 NORTH	Range 9 WEST	County SAN JUAN
Actual Location Location of Well: 955 feet from the NORTH line and 1190 feet from the WEST line				
Ground Level Elev. 5871	Producing Formation MESA VERDE	Pic Cliffs	Pool Blanco Pictured Cliffs	Dedicated Acreage: 160.00 Ext 320.00

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name
James P. Ledse
Drilling Clerk

Position
El Paso Natural Gas Co

Company
April 12, 1985

Date

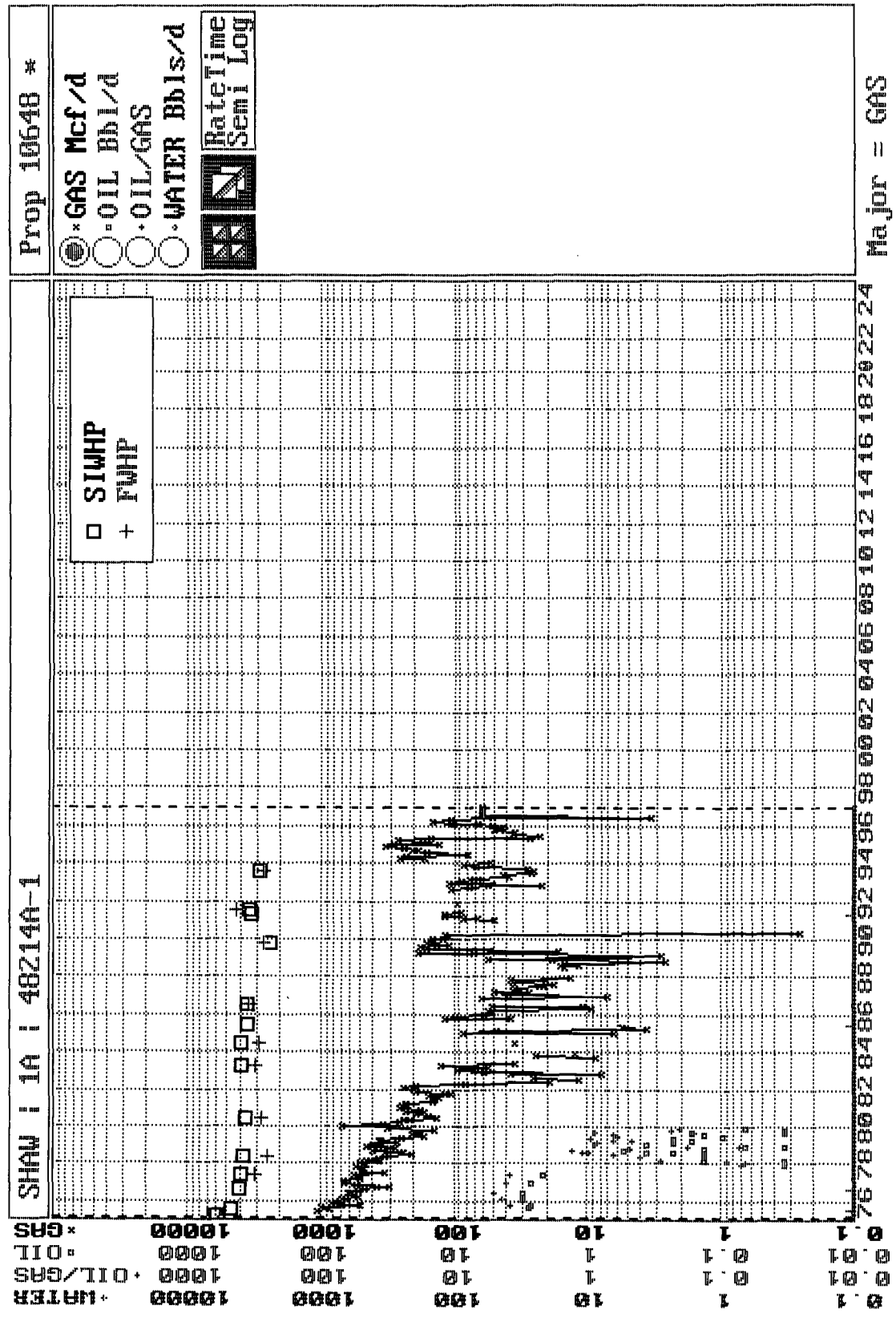
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

17 December, 1974

Date
JAMES P. LEDSE

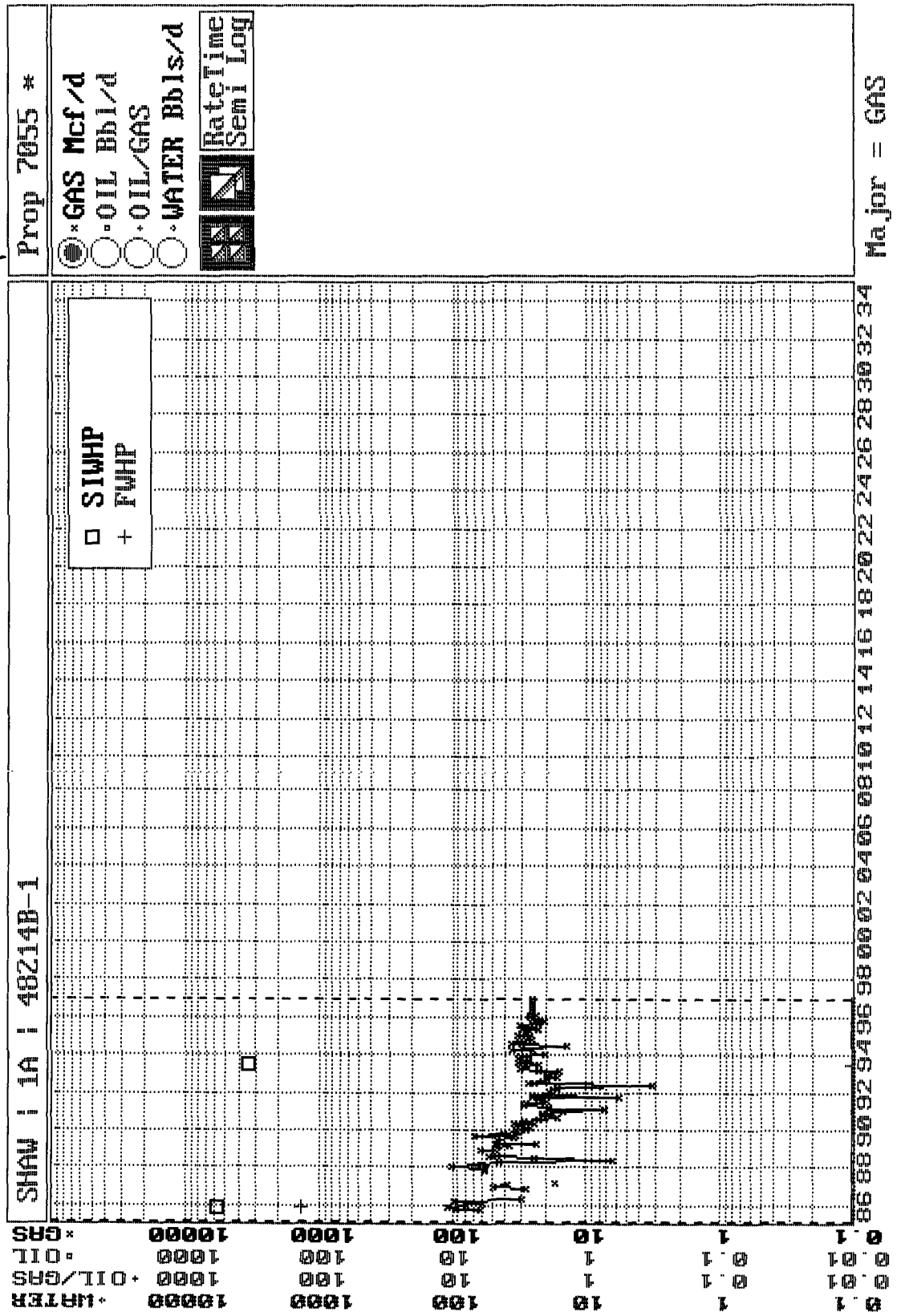
James P. Ledse
11/15/85

MV



*RB

PC

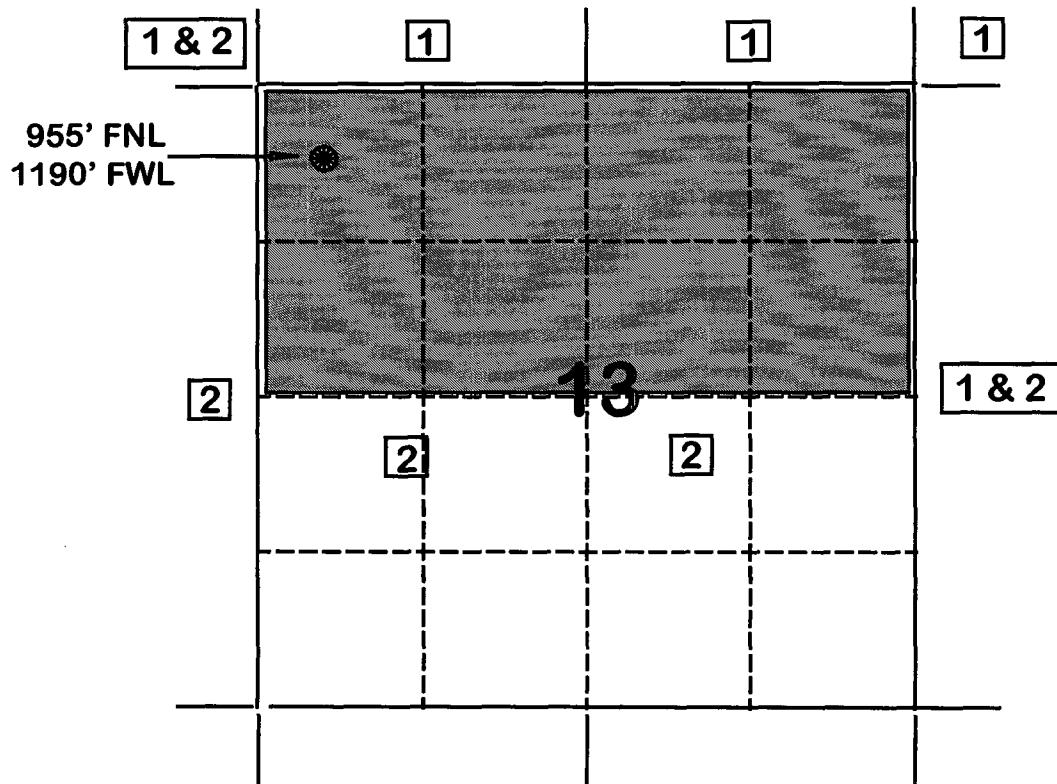


BURLINGTON RESOURCES OIL AND GAS COMPANY

**Shaw #1A
OFFSET OPERATOR \ OWNER PLAT**

Mesaverde (N/2)/ Pictured Cliffs (NW/4) Formations Commingle Well

Township 30 North, Range 9 West



- 1) Burlington Resources Oil and Gas Company Successor to Meridian Oil Inc.
- 2) Amoco Production Company
Attn: Bruce Zimney
P.O. Box 800
Denver, CO 80201

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.65
COND. OR MISC. (C/M)	C
%N2	0.15
%CO2	1.08
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	5209
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	286
BOTTOMHOLE PRESSURE (PSIA)	321.7

SHAW #1A MESAVERDE - (CURRENT)

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 10/3/13/94

GAS GRAVITY	0.65
COND. OR MISC. (C/M)	C
%N2	0.15
%CO2	1.08
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	5209
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	614
BOTTOMHOLE PRESSURE (PSIA)	694.8

SHAW #1A MESAVERDE - (ORIGINAL)

MV

Organize Data ScreenGraph Economics Report Plot Utility Quit
Browsing: SHAW | 1A | 48214A-1 Property No.: 10648
Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 1/15/103224
Item: 2/3/33 Name: DATE Type: Date Len: 8/27/203

--DATE--	---CUM_GAS--	M SIWHP
	Mcf	Psi
03/27/75	0	614.0
04/09/75	0	627.0
07/28/75	58190	470.0
08/23/76	313875	416.0
06/07/77	463869	392.0
05/23/78	614850	376.0
06/24/80	835493	367.0
03/21/83	966009	394.0
06/27/84	973360	396.0
06/20/85	977898	358.0
07/03/86	994493	352.0
09/28/89	1037840	244.0
04/15/91	1075657	330.0
07/12/91	1078427	342.0
07/29/93	1103548	286.0

F1=Help F3=PrvPro F5=PrvTbl F7=Calcu F9=Utils Alt+TableLtr=Change Table
F2=Jump F4=NxtPro F6=NxtTbl F8=Print F10=Exit Shift+<- ->=Fast Tbl R & L

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.66
COND. OR MISC. (C/M)	C
%N2	0.6
%CO2	0.55
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	5209
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	110
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	342
BOTTOMHOLE PRESSURE (PSIA)	387.8

SHAW #1A PICTURED CLIFFS - (CURRENT)

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.66
COND. OR MISC. (C/M)	C
%N2	0.6
%CO2	0.55
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	5209
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	110
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	582
BOTTOMHOLE PRESSURE (PSIA)	663.7

SHAW #1A PICTURED CLIFFS - (ORIGINAL)

PC

Organize Data ScreenGraph Economics Report Plot Utility Quit
Browsing: SHAW | 1A | 48214B-1 Property No.: 7055
Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 1/2/103224
Item: 2/3/33 Name: DATE Type: Date Len: 8/27/203

--DATE--	---CUM GAS--	M SIWHP
	Mcf	Psi
10/28/85	4653	582.0
07/02/93	86567	342.0

F1=Help F3=PrvPro F5=PrvTbl F7=Calcu F9=Utils Alt+TableLtr=Change Table
F2=Jump F4=NxtPro F6=NxtTbl F8=Print F10=Exit Shift+<- ->=Fast Tbl R & L

FARMINGTON

1996 MONTHLY PRODUCTION FOR 48214A

PHS030M1

SHAW 1A

BLANCO MESAVERDE (PRORATED GAS FIELD

MESAVERDE ZONE

DAYS =====			OIL =====			GAS =====								
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER	PROD	C
1	2	F					01	2044	31	1145	15.025			
2	2	F					01	3071	29	1145	15.025			
3	2	F					01	4403	31	1145	15.025			
4	2	F					01	3162	30	1145	15.025			
5	2	S					01	1557	31	1145	15.025			
6	2	F					01	103	17	1145	15.025			
7	2	F					01	264	31	1144	15.025			
8	2	F					01	375	31	1144	15.025			
9	2	F					01	317	30	1144	15.025			
10	2	F					01	449	31	1144	15.025			
11	2	F					01	277	30	1144	15.025			
12	2	F					01	296	31	1144	15.025			

PF6 - RETURNS TO ANNUAL DISPLAY

PF3 - TRANSFER TO UPDATE

PF10 - HELP INFORMATION

PF9 - DISPLAY MONTHLY INJECTION

00/00/00 00:00:00:0

PRS 02/05/97

B MY JOB

NUM LU #21

FARMINGTON

1996 MONTHLY PRODUCTION FOR 48214B

PHS030M1

SHAW 1A

BLANCO PICTURED CLIFFS (GAS) FIELD

PICTURED CLIFFS ZONE

DAYS =====			OIL =====			GAS =====								
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER	PROD	C
1	2	F	31				01	801	31	1118	15.025			
2	2	F	29				01	712	29	1118	15.025			
3	2	F	24				01	641	24	1118	15.025			
4	2	F	30				01	730	30	1118	15.025			
5	2	S	31				01	1018	31	1118	15.025		1	
6	2	F	17				01	563	17	1118	15.025			
7	2	F	31				01	563	31	1118	15.025			
8	2	F	31				01	464	31	1118	15.025			
9	2	F	30				01	581	30	1118	15.025			
10	2	F	31				01	776	31	1117	15.025			
11	2	F	30				01	950	30	1117	15.025			
12	2	F	31				01	654	31	1117	15.025			

PF6 - RETURNS TO ANNUAL DISPLAY

PF3 - TRANSFER TO UPDATE

PF10 - HELP INFORMATION

PF9 - DISPLAY MONTHLY INJECTION

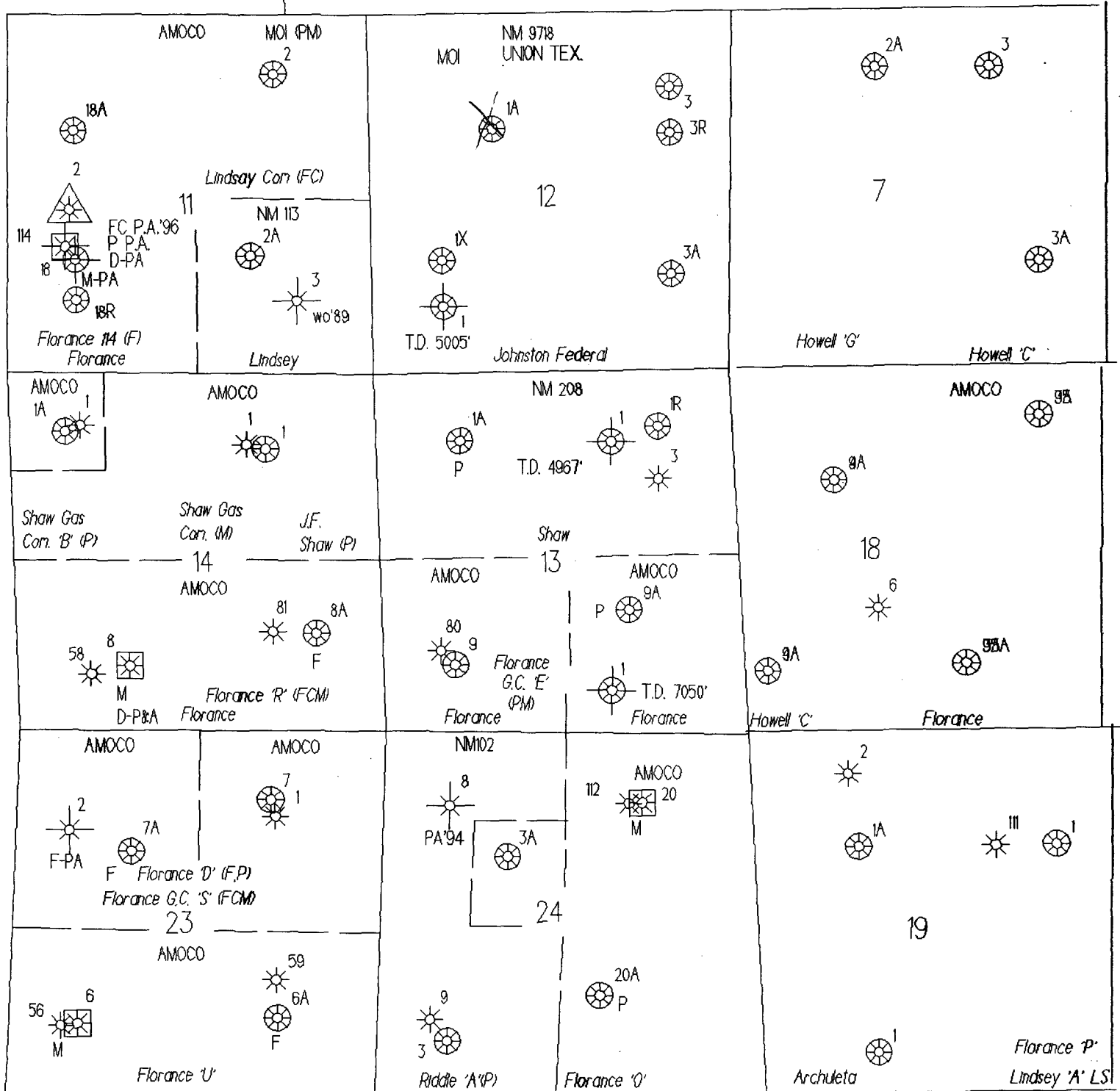
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PRS 02/05/97

B MY JOB

NUM LU #21

SHAW #1A
SECTION 13, T30N, R09W
MESAVERDE - PICTURED CLIFFS



R-09-W

R-08-W

T
30
N