

STATE OF UTAH  
DIVISION OF OIL GAS AND MINING

5. Lease Designation and Serial No. U-49537

6. If Indian, Allottee or Tribe Name None

7. Unit Agreement Name None

8. Farm or Lease Name Federal

9. Well No. #2-31 Federal

10. Field and Pool, or Wildcat Greater San Arroyo 150

11. 00, Sec., T., R., M., or Blk. and Survey or Area Sec. 31, T. 16 S., R. 26 E.

12. County or Parrish Grand 13. State Utah

14. Distance in miles and direction from nearest town or post office\* Approximately 21 miles north-northwest of Mack, Colorado

15. Distance from proposed\* location to nearest property or lease line, ft. 160' fr. east lease line  
 (Also to nearest drig. line, if any) 890' from drill unit line

16. No. of acres in lease 120

17. No. of acres assigned to this well 240 (well #2) spacing unit

18. Distance from proposed location\* to nearest well, drilling, completed, or applied for, on this lease, ft. None

19. Proposed depth 3900 feet COMTN

20. Rotary or cable tools Rotary (air)

21. Elevations (Show whether DF, RT, GR, etc.) 5436 feet Ground

22. Approx. date work will start\* August 1, 1991

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
11"	8 5/8"	26#	350 feet	circulate to surface
7 7/8"	4 1/2"	10.5#	3900	260 sks RCF

Attachments

- Well location (survey) and pad diagram
- 10-point drilling operation plan
- Blowout Preventer diagram

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DIVISION OF OIL GAS & MINING

BLM on-site inspection conducted May 28, 1991, with Mr. Elmer Duncan of Moab, Utah. Results of on-site inspection included in attached plans.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. I hereby certify that this report is true and complete to the best of my knowledge.

Signed: J. Dan Powell \*\*\* Title: Agent for C.S.V. Oil Expl. Co. Date: June 15, 1991

(This space for Federal or State office use)

API NO. 13-019-31303 Approval Date APPROVED BY THE STATE OF UTAH DIVISION OF OIL GAS AND MINING

Approved by: \_\_\_\_\_ Title: \_\_\_\_\_ DATE: 7-10-91

Conditions of approval, if any: \_\_\_\_\_

\*\*\* J. Dan Powell, Agent P.O. Box 11478 Aspen, CO 81612 (303) 923-3448

WELL SPACING: 165-6

\*See Instructions On Reverse Side

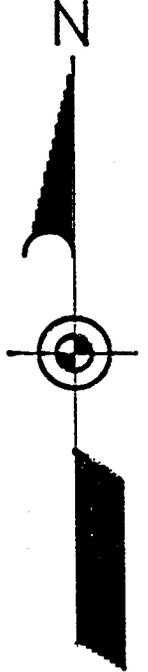
COMPANY: C.S.V. OIL EXPLORATION, INC.

LEASE: FEDERAL NO. 2-31

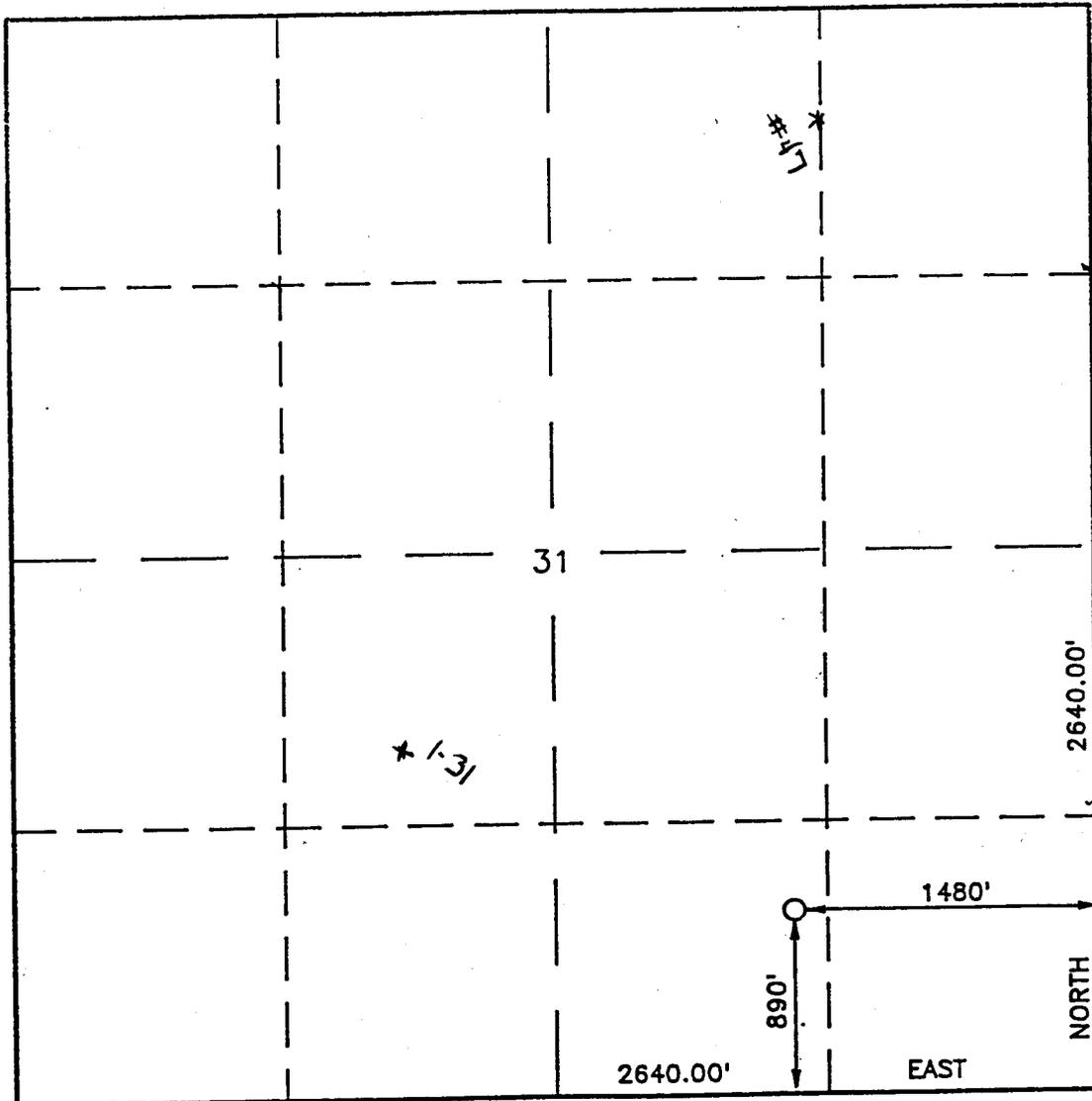
FOOTAGE: 890 FSL, 1480 FEL

SEC.: 31, TWN: T.16 S., RNG: R.26 E., SLM

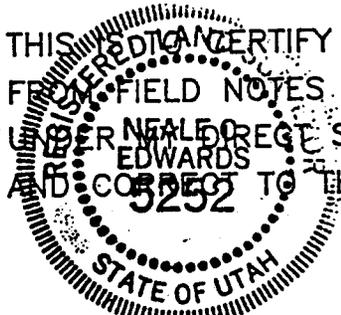
ELEVATION: 5436



SCALE:  
1" = 1000'



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY DIRECT SUPERVISION AND THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



*Neale Edwards*

LICENSED LAND SURVEYOR NO. 5252  
STATE OF UTAH

DATE: 5-21-91

3160-3 ADDENDUM

C.S.V. Oil Exploration Company #2-31 Federal  
Sec. 31, T. 16 S., R. 26 E.  
Grand County, Utah

1. Surface Formation : Mesa Verde Formation
2. Estimated tops of important stratigraphic markers:

Dakota Silt	3580'
Dakota Sand	3700'
Cedar Mountain Formation	3800'

3. Estimated depth of water, oil, gas, or minerals:

Gas in Dakota Sand from 3700'-3770'.  
No water or oil expected.

4. Proposed casing program:

Set 8 5/8" new casing (<sup>24# JVA</sup>26#/ft.) to 350 feet. Circulate cement to surface.

Set 4 1/4" new J-55 casing (10.5 #/ft.) to 3900 feet. Cement with 260 sks RCF.

5. Schematic diagram of blowout preventer is attached. BOP to be tested to 2000 psi after cement job on surface casing and to 3000 psi for full working pressure. Pipe rams will be operationally checked every 24-hours. Blind rams and annular preventer will be checked after each trip (pulled pipe). All checks of BOP will be noted on daily drilling reports.

Accessories to BOP will include upper and lower Kelly cock, floor safety valve, drill string BOP and choke manifold with pressure rating equal to that of BOP stack. Rotating pack-off head will be installed to control air/gas flow while drilling with air.

6. The well will be drilled with air to total depth. If needed air foam/mist will be used, and auxiliary materials will be on hand to control any downhole problems or fluids at surface.

7. Auxiliary Equipment

A float valve will be run in the drill string at all times.

A sub with full-opening valve will be kept on the derrick floor to stab into drill pipe when Kelly is not in the string.

#### 8. Testing, Logging, and Coring Programs

The logging program will consist of a Dual Induction resistivity log and a compensated Density-Neutron log run to total depth. No cores are anticipated and no dst's are anticipated. Completion testing plans are not finalized at this time.

#### 9. Abnormal Conditions

No abnormal pressures or temperatures have been noted or reported in wells drilled in this area at the depths contemplated in this well.

No hydrogen sulfide or other hazardous fluids are expected.

#### 10. Anticipated Starting Date and Duration

The anticipated starting date for pad and access road construction is the last week in July, with drilling to begin shortly thereafter.

Drilling should be completed within 20 days after spud date.

Productive zones will be perforated, tested and treated as necessary. Gas will be flared during testing. Produced water (if any) will be contained in the unlined reserve pit. Fracture treatment, if needed, can only be determined after gas is encountered and formation logged and tested. Completion details will be submitted on Sundry Notice for approval.

**J. Dan Powell**  
Consulting Geologist

Mining  
Petroleum  
Colorado 1041 Reports

Post Office Box 11478  
Aspen, Colorado 81612-9560  
(303) 923-3448

13 June 1991

Utah Division of Oil, Gas & Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

Re: Div. of Water Rights approval

Gentlemen:

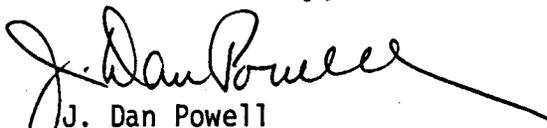
The gas well, as referenced in the attached APD, will be drilled with air from top to bottom. No water is expected in the reservoir of above the total depth. No water use is anticipated. However, should a small amount be needed, it will be brought in from Mack, Colorado, from a private source.

When I asked the Division of Water Rights about their required approval, they responded that no permit/approval was necessary under those circumstances.

I understand that if the well is completed by hydrofracturing or if the well is logged with liquid (water) in the hole, a few barrels of water may be utilized. Produced fracturing fluids injected will be removed from the site and disposed of in the prescribed manner. Permits/approval for this action will be requested if necessary.

Thank you. If more information is desired, please let me know.

Yours faithfully,

  
J. Dan Powell  
Registered Professional Geologist

DESIGNATION OF AGENT OR OPERATOR - FORM 5

The undersigned is, on record, the holder of oil and gas lease

LEASE NAME: Tyrex/C.S.V. Oil Exploration Co. Federal

LEASE NUMBER: U-49537

and hereby designates

NAME: J. Dan Powell, Consulting Geologist Tel. (303) 923-3448

ADDRESS: Post Office Box 11478 Aspen, Colorado 81612-9560

as his agent/operator, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the Division Director or Authorized Agent may serve written or oral instructions in securing compliance with the Oil and Gas Conservation General Rules and Procedural Rules of the Board of Oil, Gas and Mining of the State of Utah with respect to (describe acreage to which this designation is applicable):

SE $\frac{1}{4}$ , S $\frac{1}{2}$ /NE $\frac{1}{2}$  Sec. 31, T. 16 S., R 26 E., Grand County, Utah

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JUN 24 1991

DIVISION OF  
OIL GAS & MINING

It is understood that this designation of agent/operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Oil and Gas Conservation General Rules and Procedural Rules of the Board of Oil, Gas and Mining of the State of Utah. It is also understood that this designation of agent or operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated agent/operator, the lessee will make full and prompt compliance with all rules, lease terms or orders of the Board of Oil, Gas and Mining of the State of Utah or its authorized representative.

The lessee agrees promptly to notify the Division Director or Authorized Agent of any change in this designation.

Effective Date of Designation June 10, 1991 By: Jane S. Bunker

Company C.S.V. Oil Exploration Co.

Title: President (signature)

Address 2005 S. 300 W.  
Salt Lake City, Utah 84115

Phone: 801-487-4721

COMPANY: C.S.V. OIL EXPLORATION, INC.

LEASE: FEDERAL NO.2-31

FOOTAGE: 890 FSL, 1480 FEL

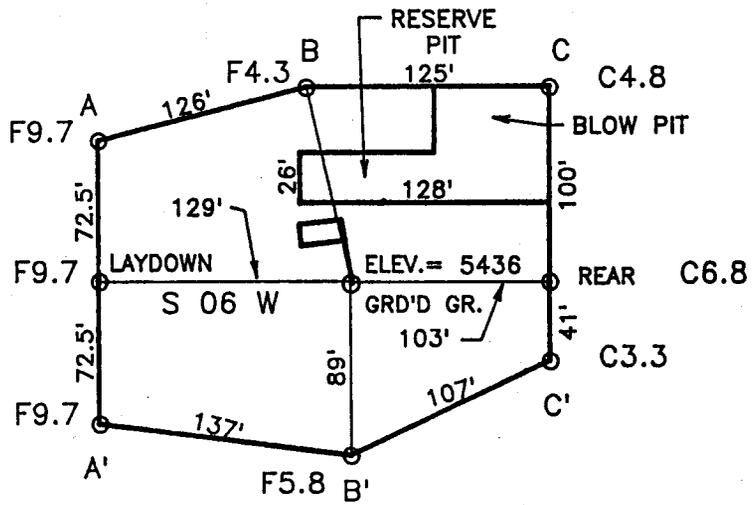
SEC.: 31, TWN: T.16 S., RNG: R.26 E., SLM

ELEVATION: 5436



NOTE:

PAD SIZED TO MINIMIZE DISTURBANCE



A-A'  
ELEV.

5460	-----				
5450	-----				
5440	-----				
5430	-----				
5420	-----				
5410	-----				

B-B'  
ELEV.

C/L

5460	-----				
5450	-----				
5440	-----				
5430	-----				
5420	-----				
5410	-----				

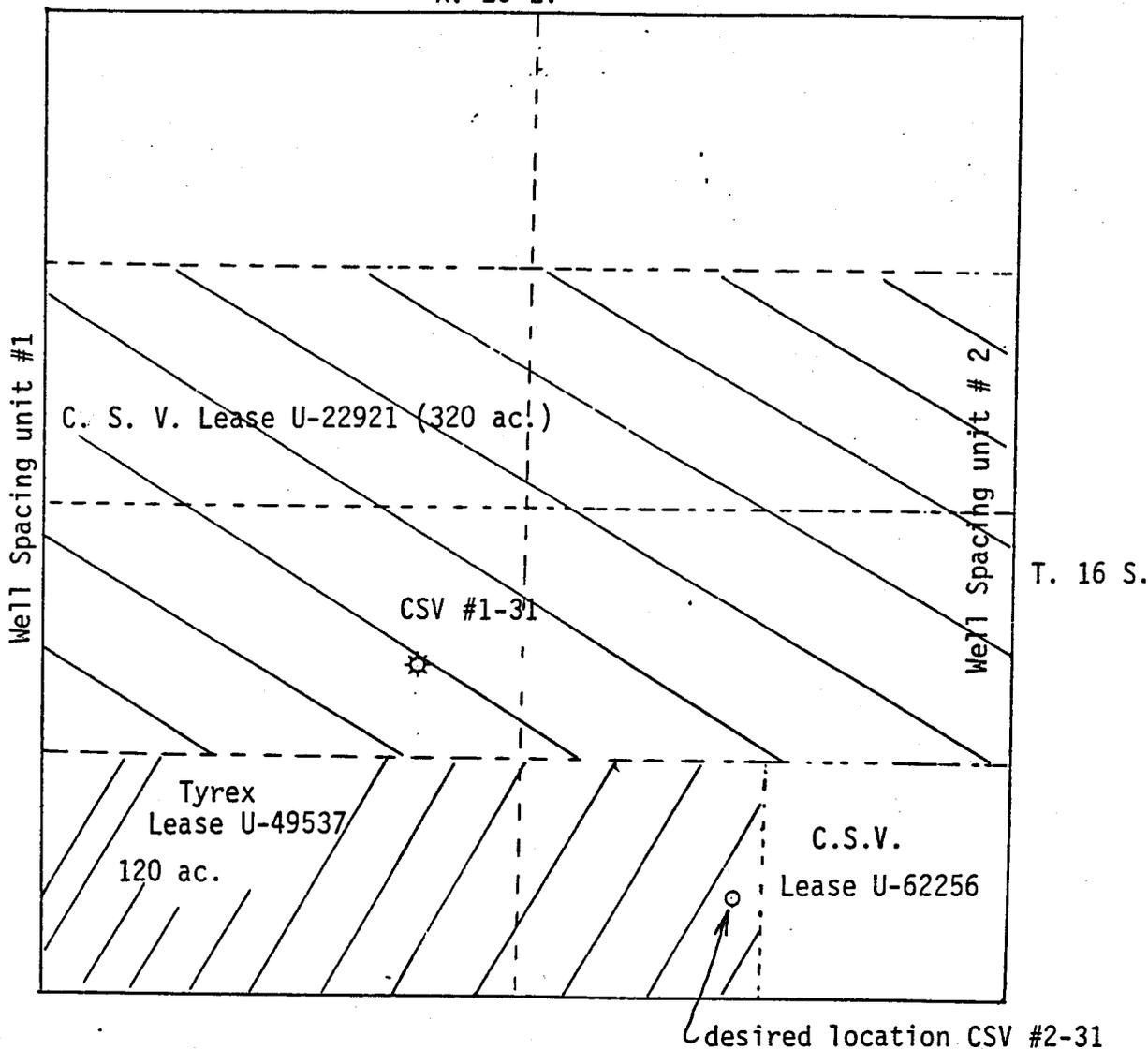
C-C'  
ELEV.

C/L

5460	-----				
5450	-----				
5440	-----				
5430	-----				
5420	-----				
5410	-----				

Section 31

R. 26 E.



Operator: Spacing units 1 and 2:

C. S. V. Oil Exploration Company  
2005 South 300 West  
Salt Lake City, UTAH 84115

Scale: 1" = 1,000 ft.

Grand County, Utah

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JUN 24 1991

DIVISION OF  
OIL GAS & MINING

BEFORE THE BOARD OF OIL, GAS AND MINING  
DEPARTMENT OF NATURAL RESOURCES  
in and for the STATE OF UTAH

-----  
IN THE MATTER OF THE APPLICATION OF )  
C.S.V. OIL EXPLORATION COMPANY FOR )  
AN ORDER ESTABLISHING DRILLING AND ) ORDER  
SPACING UNITS FOR THE DEVELOPMENT )  
AND PRODUCTION OF GAS FROM THE ) CAUSE NO. 165-6  
DAKOTA AND MORRISON FORMATIONS )  
UNDERLYING CERTAIN LANDS IN THE )  
WESTWATER AND BRYSON CANYON AREAS, )  
GRAND COUNTY, UTAH )  
-----

Pursuant to the Application of C.S.V. Oil Exploration Company, this cause came on for hearing before the Board of Oil, Gas and Mining, Department of Natural Resources of the State of Utah, at 10:00 a.m., on Thursday, September 25, 1980, in the Executive Conference Room, Holiday Inn, 1659 West North Temple, Salt Lake City, Utah.

The following Board Members were present:

Charles R. Henderson, Chairman

Edward T. Beck

E. Steele McIntyre

John L. Bell

Max A. Farbman

Also present:

Denise Dragoo, Special Assistant Attorney General

Cleon B. Feight, Director

Michael Minder, Geological Engineer

Paula Frank, Secretary of the Board

Appearances were made as follows:

James Callister, C.S.V. Oil Exploration Company

NOW, THEREFORE, the Board, having considered the testimony adduced and the exhibits received at said hearing, and being fully advised in the premises, now makes and enters the following:

FINDINGS

1. Due and regular notice of the time, place and purpose of the hearing was given to all interested parties in the form and manner and within the time required by law and the rules and regulations of the Board.

2. The Board has jurisdiction over the matter covered by said Application and over all parties interested therein and has jurisdiction to make and promulgate the Order hereinafter set forth.

3. That the applicant is requesting the Board to establish two 240-acre drilling units in Section 31, Township 16 South, Range 26 East, SLBM, Grand County, Utah, for the production of gas from the Dakota and Morrison formations.

4. That the San Arroyo Unit agreement includes the N/2 N/2 of said Section 31.

5. That because of said unit agreement it is impossible to establish the regular 320-acre drilling units already authorized in this area.

ORDER

IT IS HEREBY ORDER by this Board as follows:

To prevent the waste of gas and associated hydrocarbons, to avoid the drilling of unnecessary wells, and to protect correlative rights the application is hereby granted as follows:

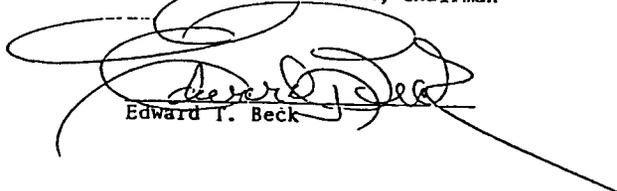
1. with respect to Section 31, Township 16 South, Range 26 East, SLBM, the S/2 NW/4 and the SW/4 is hereby designated as a 240-acre drilling unit and the S/2 NE/4 and the SE/4 is hereby designated as a 240-acre drilling unit for the Dakota and Morrison Formations underlying the same.

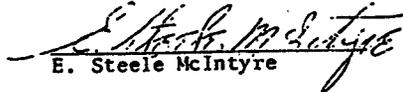
2. a well shall be permitted on each of said drilling units to be located where authorized by the staff of the Division of Oil, Gas and Mining after taking into consideration the topography of the area and any offset wells.

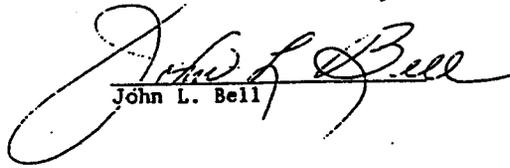
DATED this 25th day of September, 1980.

STATE OF UTAH  
BOARD OF OIL, GAS AND MINING

  
Charles R. Henderson, Chairman

  
Edward I. Beck

  
E. Steele McIntyre

  
John L. Bell

\_\_\_\_\_  
Max A. Farbman

OPERATOR CSV Oil Exploration Co N-0170 DATE 6-27-91

WELL NAME Federal W-31

SEC S W SE 31 T 16 S R 016 F COUNTY Grand

43-019-31323  
API NUMBER

Federal (1)  
TYPE OF LEASE

CHECK OFF:

PLAT.

BOND

NEAREST WELL

LEASE

FIELD SLBM

POTASH OR OIL SHALE

PROCESSING COMMENTS:

0 additional wells within Sec 31  
Water Permit indicated in letter no permit necessary

APPROVAL LETTER:

SPACING:

R615-2-3

N/A  
UNIT

R515-3-2

1165-6 9-25-80  
CAUSE NO. & DATE

R615-3-3

STIPULATIONS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Norman H. Bangertter  
Governor

Dee C. Hansen  
Executive Director

Dianne R. Nielson, Ph.D.  
Division Director

355 West North Temple  
3 Triad Center, Suite 360  
Salt Lake City, Utah 84180-1203  
801-538-5340

July 10, 1991

C.S.V. Oil Exploration Company  
2005 South 300 West  
Salt Lake City, Utah 84115

Gentlemen:

Re: Federal #2-31 Well, 890 feet from the South line, 1480 feet from the East line, SW SE, Section 31, Township 16 South, Range 26 East, Grand County, Utah

Approval to drill the referenced well is hereby granted in accordance with the Order in Cause No. 165-6 dated September 25, 1980.

In addition, the following actions are necessary to fully comply with this approval:

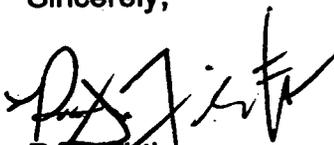
1. Spudding notification within 24 hours after drilling operations commence.
2. Submittal of Entity Action Form 6, within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
3. Submittal of the Report of Water Encountered During Drilling, Form 7.
4. Prompt notification in the event it is necessary to plug and abandon the well. Notify R. J. Firth, Associate Director, (Office) (801) 538-5340, (Home) 571-6068, or J. L. Thompson, Lead Inspector, (Home) 298-9318.
5. Compliance with the requirements of Utah Admin. R.615-3-20, Gas Flaring or Venting.

Page 2  
C.S.V. Oil Exploration Company  
Federal #2-31  
July 10, 1991

6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of Drinking Water/Sanitation, telephone (801) 538-6159.
7. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-019-31323.

Sincerely,



R. J. Birth  
Associate Director, Oil & Gas

tas  
Enclosures  
cc: Bureau of Land Management  
J. L. Thompson  
we14/1-12

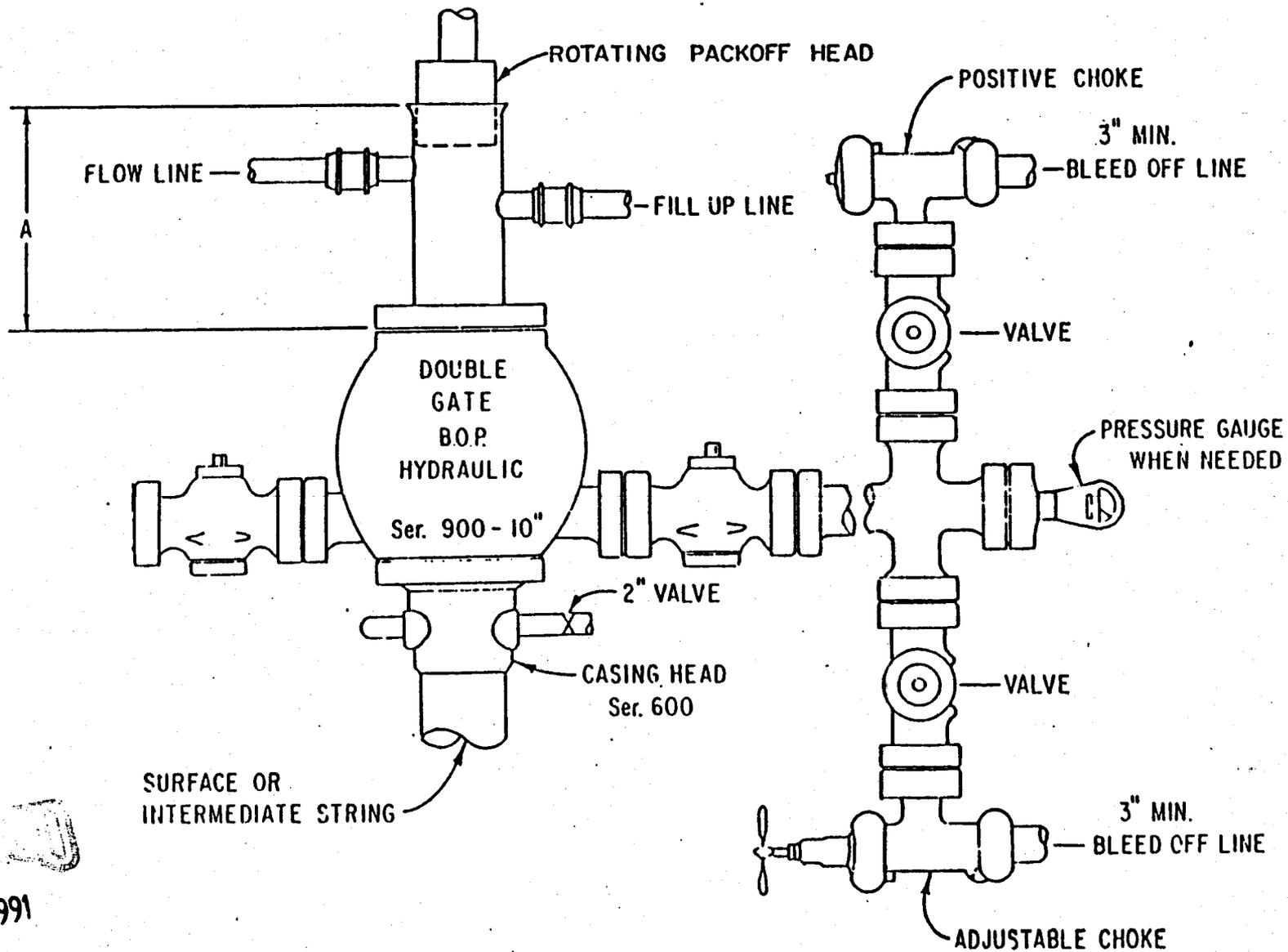
7-12-91

Mr. Matthews-

Here is the BOP diagram for  
the CSV # 2-31 well APD-

(Sec. 31, T 16S, R 26E, Grand Co.)

Thanks- J. Dan Powell



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DIVISION OF  
OIL GAS & MINING

EXHIBIT I  
BLOWOUT PREVENTER DIAGRAM

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK  
 DRILL       DEEPEN       PLUG BACK

b. TYPE OF WELL  
 OIL WELL       GAS WELL       OTHER       SINGLE ZONE       MULTIPLE ZONE

2. NAME OF OPERATOR  
 C.S.V. Oil Exploration Company

3. ADDRESS OF OPERATOR  
 2005 South 300 West, Salt Lake City, Utah 84115 (801)487-4721

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
 At surface SW $\frac{1}{4}$  of SE $\frac{1}{4}$  Sec. 31, T.16S., R.26E., SLM 890 fsl, 1480 fel  
 At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 43-019-31323  
 Approximately 21 miles north-northwest of Mack, Colorado

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.  
 160' fr. east lease line  
 (Also to nearest drig. unit line, if any) 890' fr. drill unit

16. NO. OF ACRES IN LEASE  
 120

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 240

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
 None

19. PROPOSED DEPTH  
 3900 feet

20. ROTARY OR CABLE TOOLS  
 Rotary (Air)

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 5436 feet (ground)

22. APPROX. DATE WORK WILL START\*  
 August 1, 1991

5. LEASE DESIGNATION AND SERIAL NO.  
 U-49537

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 None

7. UNIT AGREEMENT NAME  
 None

8. FARM OR LEASE NAME  
 Federal

9. WELL NO.  
 2-31 Federal

10. FIELD AND POOL, OR WILDCAT  
 Greater San Arroyo

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 SLM  
 Sec. 31, T.16 S., R 26 E.

12. COUNTY OR PARISH  
 Grand Co.

13. STATE  
 Utah

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NOV 18 1991

DIVISION OF  
OIL GAS & MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposed to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED J. Dan Powell TITLE Agent for C.S.V. Oil Expl. Corp DATE June 15, 1991  
(This space for Federal or State office use)

PERMIT NO. /S/ WILLIAM C. STRINGER Assistant District Manager  
APPROVED BY for Minerals TITLE NOV 15 1991 DATE

FLARING OR VENTING OF  
GAS IS SUBJECT TO NTL 4-A  
Dated 1/1/80

\*See Instructions On Reverse Side

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 reports.

DGM

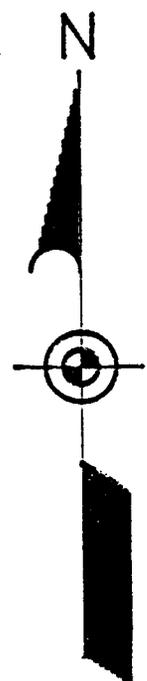
COMPANY: C.S.V. OIL EXPLORATION, INC.

LEASE: FEDERAL NO. 2-31

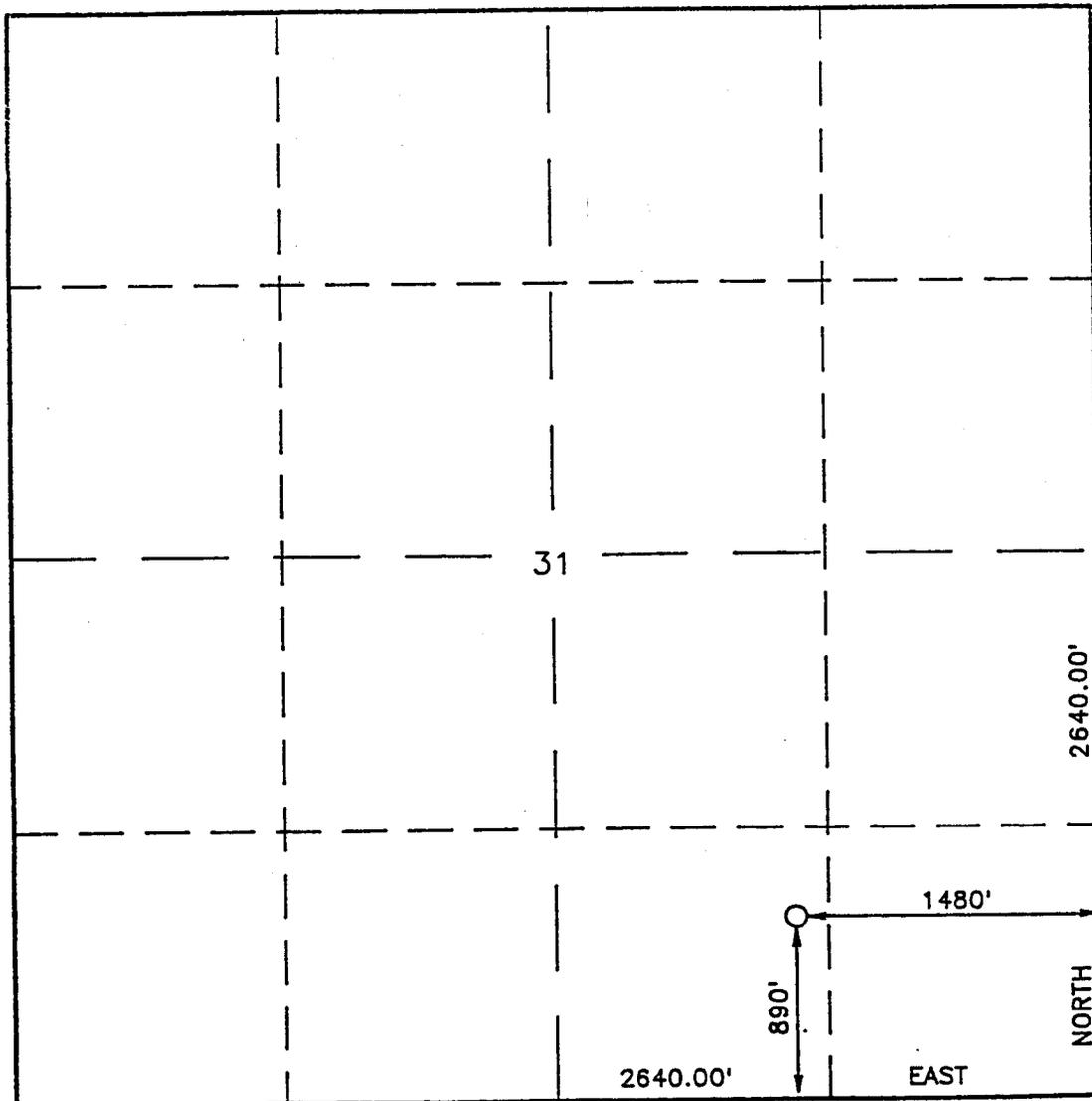
FOOTAGE: 890 FSL, 1480 FEL

SEC.: 31, TWN: T.16 S., RNG: R.26 E., SLM

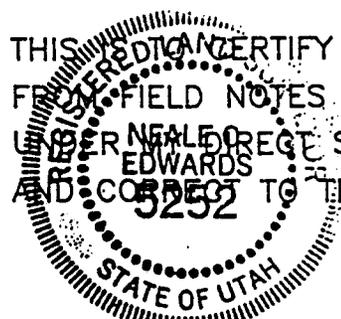
ELEVATION: 5436



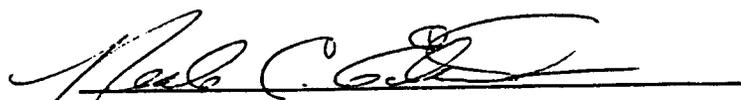
SCALE:  
1" = 1000'



THIS SURVEYOR CERTIFY THAT THE ABOVE PLAT WAS PREPARED  
FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR  
UNDER MY DIRECT SUPERVISION AND THE SAME ARE TRUE  
AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



DATE: 5-21-91

  
LICENSED LAND SURVEYOR NO. 5252  
STATE OF UTAH

CSV Oil Exploration Company  
CSV Fed. No. 2-31  
SWSE Sec. 31, T. 16 S., R. 26 E.  
Grand County, Utah  
Lease U-49537

#### CONDITIONS OF APPROVAL

Approval of this application 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.

Be advised that CSV Oil Exploration Company is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by UT0846 (Principal - CSV Oil Exploration Company) via surety consent as provided for in 43 CFR 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR 3106.7-2 continuing responsibility are met.

This permit will be valid for a period of one year from the date of approval. A one-time, 90 day extension of this period may be granted. After permit termination, a new application must be filed for approval.

All lease operations will be conducted in full compliance with applicable regulations (43 CFR 3100), Onshore Oil and Gas Orders, lease terms, notices to lessees, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions and the approved plan will be made available to field representatives to insure compliance.

#### A. DRILLING PROGRAM

1. There will be no deviation from the proposed drilling and/or workover program without prior approval from the Assistant District Manager. "Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2. Safe drilling and operating practices must be observed.

2. Daily drilling and completion progress reports shall be submitted to the District office on a weekly basis.

3. No trivalent or hexavalent chromate additives shall be used in the mud system. Due to potential for contamination of usable quality water aquifers, chromates are banned from Federal leases.

4. Surface casing shall have a centralizer on each of the bottom three joints.

5. A float valve above the bit shall be in place and operational during air/gas drilling.

6. BOP systems shall be consistent with API RP 53 and Onshore Oil and Gas Order No. 2. Pressure tests of the surface casing and all BOP equipment potentially subject to pressure will be conducted before drilling the surface casing shoe. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Ram preventers shall be inspected and operated each trip (no more than once a day is necessary), and annular preventers shall be inspected and operated weekly to ensure good mechanical working order. These inspections shall be recorded on the daily drilling report.

7. Operations authorized by this permit shall not be suspended for more than 30 days without prior approval of the Authorized Officer. All conditions of this approval shall be applicable during any operations conducted with a replacement rig.

8. When the completion program is determined, a sundry notice describing the completion shall be submitted to this office for approval.

9. Should the well become productive, the BLM. District Office must be notified no later than five business days after production begins. Notification shall be by letter or sundry notice, or orally to be followed by a letter or sundry notice.

10. Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 Mmcf following its completion, whichever comes first, without prior written approval of the Authorized Officer. Surface casing shall have centralizer on each of the bottom three joints.

11. To determine cement top and bond quality, a cement bond log (CBL) or cement evaluation tool (CET) shall be run after the 4½" casing is run and cemented in place.

CONDITIONS OF APPROVALEA Log No. 1346-78 Lease NO. U-49537Project Application for Permit to Drill Exploration Well C.S.V. 2-31 FederalApplicant C.S.V. Oil Exploration Company Address Salt Lake City, Utah 84115Project Location T16S, R26 E (SLM), Section 31: SW1/4 SE1/4, Grand County, UtahBLM Office Grand Resource Area Phone No. (801) 259-8193CONSTRUCTION

1. The operator/contractor will contact the Grand Resource Area Office in Moab, Utah (801-259-8193) 48 hours prior to beginning work on public lands.
2. The dirt contractor will be furnished an approved copy of the surface use plan and BLM stipulations prior to starting any work.
3. Surface disturbance and vehicular travel will be limited to the approved location and access route. Any additional area needed will require BLM approval in advance of use.
4. Access (ingress and egress) will be controlled by appropriate signs as needed along the road.
5. The access road and well pad will be sprinkled with water as needed to control dust.
6. Neither construction material nor equipment will be stored on the access road or location without prior BLM approval.

DRILLING

1. In order to reduce fugitive dust, the operator/contractor will be required to periodically water down the access road and drill pad.

POST-DRILLING

1. The operator/contractor will contact the Grand Resource Area BLM office in Moab, Utah (801-259-8193) 48 hours prior to starting rehabilitation work that involves earthmoving equipment and completion of restoration measures.
2. If the well is completed as a producer, that part of the well pad not needed for production facilities will be reclaimed as prescribed in stipulation 3 (see below). Laying of that part of a gas transmission pipeline in the N1/2 S1/2 of Section 31 will be subject to the following seasonal stipulation: In order to minimize watershed damage, exploration, drilling, and other development activity will be allowed only during the period from April 30 to November 1. This limitation does not apply to maintenance and operation of producing wells. Exceptions to this limitation in any year may be specifically

approved in writing by the Authorized Officer of the Bureau of Land Management. If the well is a producer, and the applicant desires to construct the surface line, exceptions to the stipulation will be based on existing soil and weather conditions at that time.

3. If the well is not completed as a producer, each area disturbed by the operator/contractor will be recontoured to blend as nearly as possible with the surrounding area, with stockpiled topsoil evenly distributed over these areas. Drill pads will not be smoothed out, but will be left with a roughened surface. Scarification parallel to the ground contour will be effected to a depth of 8 inches. The following seed mixture will be drilled during a period specified by the BLM:

<u>Species</u>	<u>Lbs/Acre</u>
Crested wheatgrass	2
Russian wildrye	3
Indian ricegrass	2
Bottlebrush squirreltail	3
Lewis flax	1
Palmer penstemon	1
Fourwing saltbush	3
Forage kochia	3
	<hr/>
	18 total

The re-seeded areas will be fenced for two years to allow for successful rehabilitation.

B. SURFACE USE PLAN

1. The dirt contractor will be provided with an approved copy of the surface use plan of operations before initiating construction.

2. All wells, whether drilling, producing, suspended, or abandoned, will be identified in accordance with 43 CFR 3162.6.

3. A cultural resource clearance will be required before any construction begins. The operator is responsible for informing all persons in the area who are associated with this project that they will be subject prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized officer (AO). Within five (5) working days, the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places;
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and,
- a time frame for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

4. The reserve pit shall be located in cut material, with at least 50% of the pit volume being below original ground level. Three sides of the reserve pit will be fenced before drilling starts. The fourth side will be fenced as soon as drilling is completed, and shall remain until the pit is dry. As soon as the reserve pit has dried or within 18 months of completion of drilling whichever is least, all areas not needed for production will be rehabilitated.

5. Surface disturbance and vehicular travel will be limited to the approved location and access road. Any additional area needed must be approved by the Area Manager in advance.

6. Trash must be contained in a trash cage and hauled away to an approved disposal site as necessary but no later than at the completion of drilling operations.

7. If the well is productive, cattle guards will be installed on the access road at fence crossings. The access road will be rehabilitated or brought to Resource (Class III) Road Standards within sixty (60) days of dismantling the drilling rig. If this time frame cannot be met, the Area Manager will be notified so that temporary drainage control can be installed along the access road.

8. If a tank battery is constructed on this lease, it will be surrounded by a dike of sufficient capacity to contain 150% of the storage capacity of the largest tank in the battery. All loading lines and valves will be placed inside the berm surrounding the tank battery.

9. All permanent (on-site for six (6) months or longer) structures constructed or installed (including oil well pumping units) shall be painted a flat, nonreflective, earth tone color to blend with the local environment, as determined by the Rocky Mountain Five-State Interagency Committee. All facilities shall be painted within six (6) months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded. Colors shall be coordinated with the Price River Resource Area office prior to initiating painting.

10. All off-lease storage, off-lease measurement, or commingling (on-lease or off-lease) shall have prior written approval from the Assistant District Manager.

11. Pipeline construction activity is not authorized under this permit.

12. Copies of all water analysis required by the State of Utah in relation to surface discharge of produced water will be submitted to the Moab District Office, Bureau of Land Management.

13. Produced waste water will be confined to an unlined pit for a period not to exceed ninety (90) days after initial production. During the ninety (90) day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the Assistant District Manager's approval pursuant to Onshore Oil and Gas Order No. 7 (NTL-2B).

Plans will be formulated for long term monitoring of aquifers and springs in the area of proposed development prior to approval of further Applications for Permit to Drill.

14. If at any time the facilities located on public land authorized by the terms of the lease are no longer included in the lease (due to contraction in the unit or other lease or unit boundary change) the BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental, or other financial obligation determined by the authorized officer (AO).B.

### C. REQUIRED NOTIFICATIONS AND APPROVALS

Required verbal notifications are summarized in Table 1, attached.

Spud- Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District office within twenty-four (24) hours after spudding (regardless of whether spud was made with a dry hole digger or large rotary rig). If the spudding occurs on a weekend or holiday, the written report will be submitted on the following work day.

Undesirable Events/Immediate Reports- Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be immediately reported to the Resource Area in accordance with requirements of NTL-3A.

Cultural Resources- If cultural resources are discovered during construction, work that might disturb the resources is to stop, and the Area Manager is to be notified.

First Production- Should the well be successfully completed for production, the Assistant District Manager, Minerals Division will be notified when the well is placed in producing status. Such notification may be made by phone, but must be followed by a sundry notice or letter not later than five (5) business days following the date on which the well is placed on production.

A first production conference will be scheduled within fifteen (15) days after receipt of the first production report. The Resource Area Office will coordinate the field conference.

Well Completion Report- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted to the District Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gas) will be submitted when requested by the Assistant District Manager.

Plugging and Abandonment- If the well is completed as a dry hole, plugging instructions must be obtained from the BLM, Moab District Office prior to initiating plugging operations. Table 1 of this document provides the after-hours phone numbers of personnel who are authorized to give plugging instructions.

The top of the marker will be closed or capped.

The following minimum information will be permanently placed on the marker with a plate, cap, or beaded-on with a welding torch:

"Fed" or "Ind", as applicable. "Well number, location by 1/4 1/4 section, township and range". "Lease number".

A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the Assistant District Manager, Minerals Division within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area Manager or his representative, or the appropriate surface managing agency.

Venting/Flaring of Gas- NTL-4A allows venting/flaring of gas during the initial well evaluation period not to exceed 30 days or 50 Mmcf. Venting/flaring beyond the initial test period threshold must be approved by the District Office.

NOTIFICATIONS

Notify Elmer Duncan of the Grand Resource Area, at  
(801) 259-8193 for the following:

2 days prior to commencement of dirt work, construction or  
reclamations;

1 day prior to spudding;

50 feet prior to reaching surface casing depth;

3 hours prior to testing BOP's;

24 hours prior to closing the reserve pit.

If the person at the above number cannot be reached, then notify Fred  
Oneyear in the Moab District Office at (801) 259-6111 or at home (801)  
259-5937 (If unsuccessful, then notify one of the following people  
listed below).

Notify the Moab District Office, Branch of Fluid Mineral at (801) 259-  
6111 for the following:

No well abandonment operations will be commenced without the  
prior approval of the Assistant District Manager, Mineral  
Resources Division. In the case of newly drilled dry holes, in  
emergency situations, verbal approval can be obtained by calling  
the following individuals, in the order listed.

Dale Manchester, Petroleum Engineer Office Phone: (801) 259-6111

Home Phone: (801) 259-6239

Eric Jones, Petroleum Engineer Office Phone: (801) 259-6111

Home Phone: (801) 259-2214

If unable to reach the above individuals including weekends, holidays,  
or after hour please call the following:

Lynn Jackson, Office Phone: (801) 259-6111

Chief, Branch of Fluid Minerals  
Home Phone: (801) 259-7990

24 HOURS ADVANCE NOTICE IS REQUIRED FOR ALL ABANDONMENTS

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

6. Lease Designation and Serial Number U-49537
7. Indian Allottee or Tribe Name None
8. Unit or Communitization Agreement Cause No. 165-6 240 Acres

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, deepen existing wells, or to re-enter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT for such proposals.

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other (specify)		9. Well Name and Number Federal No. 2-31
2. Name of Operator C. S. V. Oil Exploration Company		10. API Well Number 43-019-31323
3. Address of Operator 2005 South 300 West Salt Lake City, Utah 84115	4. Telephone Number 487-4721	11. Field and Pool, or Wildcat Greater San Arroyo
5. Location of Well Footage : 890 FSL, 1480 FEL County : Grand QQ, Sec. T., R., M. : SW/4 SE/4 Sec. 31, T 16 S, R 26 E., SLM State : UTAH		

12. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA																											
<p align="center"><b>NOTICE OF INTENT</b> (Submit in Duplicate)</p> <table border="0"> <tr><td><input type="checkbox"/> Abandonment</td><td><input type="checkbox"/> New Construction</td></tr> <tr><td><input type="checkbox"/> Casing Repair</td><td><input type="checkbox"/> Pull or Alter Casing</td></tr> <tr><td><input checked="" type="checkbox"/> Change of Plans</td><td><input type="checkbox"/> Recompletion</td></tr> <tr><td><input type="checkbox"/> Conversion to Injection</td><td><input type="checkbox"/> Shoot or Acidize</td></tr> <tr><td><input type="checkbox"/> Fracture Treat</td><td><input type="checkbox"/> Vent or Flare</td></tr> <tr><td><input type="checkbox"/> Multiple Completion</td><td><input type="checkbox"/> Water Shut-Off</td></tr> <tr><td><input type="checkbox"/> Other _____</td><td></td></tr> </table> <p>Approximate Date Work Will Start <u>August 12, 1992</u></p>	<input type="checkbox"/> Abandonment	<input type="checkbox"/> New Construction	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Pull or Alter Casing	<input checked="" type="checkbox"/> Change of Plans	<input type="checkbox"/> Recompletion	<input type="checkbox"/> Conversion to Injection	<input type="checkbox"/> Shoot or Acidize	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Vent or Flare	<input type="checkbox"/> Multiple Completion	<input type="checkbox"/> Water Shut-Off	<input type="checkbox"/> Other _____		<p align="center"><b>SUBSEQUENT REPORT</b> (Submit Original Form Only)</p> <table border="0"> <tr><td><input type="checkbox"/> Abandonment *</td><td><input type="checkbox"/> New Construction</td></tr> <tr><td><input type="checkbox"/> Casing Repair</td><td><input type="checkbox"/> Pull or Alter Casing</td></tr> <tr><td><input type="checkbox"/> Change of Plans</td><td><input type="checkbox"/> Shoot or Acidize</td></tr> <tr><td><input type="checkbox"/> Conversion to Injection</td><td><input type="checkbox"/> Vent or Flare</td></tr> <tr><td><input type="checkbox"/> Fracture Treat</td><td><input type="checkbox"/> Water Shut-Off</td></tr> <tr><td><input type="checkbox"/> Other _____</td><td></td></tr> </table> <p>Date of Work Completion _____</p> <p><small>Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form. * Must be accompanied by a cement verification report.</small></p>	<input type="checkbox"/> Abandonment *	<input type="checkbox"/> New Construction	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Pull or Alter Casing	<input type="checkbox"/> Change of Plans	<input type="checkbox"/> Shoot or Acidize	<input type="checkbox"/> Conversion to Injection	<input type="checkbox"/> Vent or Flare	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Water Shut-Off	<input type="checkbox"/> Other _____	
<input type="checkbox"/> Abandonment	<input type="checkbox"/> New Construction																										
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<input type="checkbox"/> Multiple Completion	<input type="checkbox"/> Water Shut-Off																										
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<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Water Shut-Off																										
<input type="checkbox"/> Other _____																											

13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Change in well control equipment from that stated in APD.

Operator desires to use standard 2M BOPE system, as in 43 CFR Part 3160, Onshore Oil and Gas Operations Order No. 2, November 18, 1988, Section III, A. para 2,a,ii, 2M system.

The 2M (2,000psi) system is standard practice in this area of the North Bar-X and San Arroyo fields.

14. I hereby certify that the foregoing is true and correct

Name & Signature  
(State Use Only)

*J. Dan Powell*

Title Agent

Date 7/30/92

ACCEPTED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING  
DATE: 8-5-92  
BY: *[Signature]*

**RECEIVED**

AUG 05 1992

DIVISION OF  
OIL GAS & MINING

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: CSV OIL EXPLORATION 43-019-31323

WELL NAME: FEDERAL 2-31

Section 31 Township 16S Range 26E County GRAND

Drilling Contractor VECO

Rig # 2

SPUDED: Date 8/25/92

Time 12:05 AM

How ROTARY

Drilling will commence \_\_\_\_\_

Reported by MIKE POWELL

Telephone # 1-487-4721

Date 8/26/92 SIGNED FRM

OPERATOR CSV Oil Exploration Co. OPERATOR ACCT. NO. N 0170  
ADDRESS 2005 South 300 West  
Salt Lake City, Utah 84115

ENTITY ACTION FORM - FORM 6

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	99999	11390	43-019-31323	CSV Federal # 2-31	SW/SE	31	16S	26E	Grand	8-24-92	
WELL 1 COMMENTS: Federal-Lease Unit-N/A Entity added 8-31-92 for Field-San Arroyo Prop.Zone-CDMTN											
WELL 2 COMMENTS:											
WELL 3 COMMENTS:											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

**RECEIVED**

ACTION CODES (See instructions on back of form)

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

AUG 28 1992  
DIVISION OF  
OIL GAS & MINING

J. Dan Powell  
Signature  
Agent  
Title  
8-26-92  
Date  
Phone No. (801) 487-4721

3160  
(UT-922)

September 23, 1992

CSV Oil Exploration Co.  
2005 South 300 West  
Salt Lake City, Utah 84115

Fed 2-71

43-019-31323

Gentlemen:

Enclosed is one approved copy of Communitization Agreement No. UTU70408. This agreement communities all rights as to natural gas and associated liquid hydrocarbons from the Dakota and Morrison Formations, covering S $\frac{1}{2}$ NE $\frac{1}{4}$ , SE $\frac{1}{4}$  of Section 31, Township 16 South, Range 26 East, SLB&M, Grand County, Utah. This agreement conforms with the spacing set forth in Order No. ~~156-1~~ <sup>165-6</sup> which was issued by the State of Utah, Board of Oil, Gas and Mining.

This agreement is effective as of September 9, 1992. The communitized area covers 240.00 acres and includes portions of Federal oil and gas leases U-22921, U-49537, U-62256.

Approval of this agreement does not warrant or certify that the operator thereof and other holders of operating rights hold legal or equitable title to those rights in the subject leases which are committed hereto.

Minerals Management Service Form MMS-3160, "Monthly Report of Operations", must be submitted for this agreement beginning with the month in which drilling operations commence. Form MMS-3160 is to be mailed to the Minerals Management Service, Production Accounting Division, P. O. Box 17110, Denver, Colorado 80217.

RECEIVED

SEP 24 1992

DIVISION OF  
OIL GAS & MINING

If this well is producing, this approval requires the submission of a Payor Information Form MMS-4025 to the Minerals Management Service (MMS) within 30 days (30 CFR 210.51). Please notify the designated payor or payors (purchasers, working interest owners, or others) as soon as possible regarding this requirement. Any production royalties that are due must be reported and paid within 90 days of the Bureau of Land Management's approval date or the payors will be assessed interest for late payment under the Federal Oil and Gas Royalty Management Act of 1982 (See 30 CFR 218.54). If you need assistance or clarification, please contact the Minerals Management Service at 1-800-525-9167 or 303-231-3504.

Please furnish all interested principals with necessary evidence of this approval.

Sincerely,  
(Orig. Sgd.) R. A. Henricks

Robert A. Henricks  
Chief, Branch of Fluid Minerals

Enclosure

bcc: Branch of Lands and Minerals Operations w/enclosure  
District Manager - Moab w/enclosure  
File - UTU70408  
Division of Oil Gas and Mining  
MMS - Reference Data Branch  
Agr. Sec. Chron.  
Fluid Chron.

922:MCoulthard:mc:9-23-92

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

<p><b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)</p>		<p>5. LEASE DESIGNATION AND SERIAL NO. <b>U-49537</b></p> <p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</p> <p>7. LEASE AGREEMENT NAME <b>Comm. Agreement</b> <b>UTU70408</b></p> <p>8. FARM OR LEASE NAME <b>Federal</b></p> <p>9. WELL NO. <b>2-31 Federal</b></p> <p>10. FIELD AND POOL, OR WILDCAT <b>Greater San Arroyo</b></p> <p>11. SEC., T., R., M., OR BLM. AND SURVEY OR ABBA <b>Sec. 31, T16S, R26E, SLM</b></p> <p>12. COUNTY OR PARISH   13. STATE <b>Grand   Utah</b></p>
<p>1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER</p>		
<p>2. NAME OF OPERATOR <b>C.S.V. Oil Exploration Company</b></p>		
<p>3. ADDRESS OF OPERATOR <b>2005 South 300 West, Salt Lake City, Utah 84115</b></p>		
<p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface <b>890' N/S, 1,480' W/E line</b></p>		
<p>14. PERMIT NO. <b>43-019-31323</b></p>	<p>15. ELEVATIONS (Show whether DP, RT, CR, etc.) <b>5436' GR</b></p>	

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	FULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____	
(Other) <b>Status</b>		(NOTE: Report results of multiple completion on Well Completion or Recombination Report and Log form.)	

17. 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.)\*

The above well was placed on production January 20, 1993 at 3:30 pm.  
Natural gas is delivered to Mesa Pipeline. The well is producing about 325 MCF/day.

**RECEIVED**  
JAN 25 1993  
DIVISION OF  
OIL GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED *[Signature]* TITLE Leas DATE January 23, 1993

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

5. LEASE DESIGNATION AND SERIAL NO.

U-49537

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

UNIT AGREEMENT NAME  
Comm. Agreement  
UTU70208

8. FARM OR LEASE NAME

Federal

9. WELL NO.

2-31 Federal

10. FIELD AND POOL, OR WILDCAT

Greater San Arroyo

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec. 31, T16S, R26E, SLM

12. COUNTY OR PARISH  
Grand

13. STATE  
Utah

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR.  Other

2. NAME OF OPERATOR  
C.S.V. Oil Exploration Company

3. ADDRESS OF OPERATOR  
2005 South 300 West, Salt Lake City, Utah 84115

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface 890' N/S, 1480' W/E

At top prod. interval reported below Same

At total depth Same

14. PERMIT NO. 43-019-31323  
DATE ISSUED 11-15-91

15. DATE SPUDDED 8-24-92  
16. DATE T.D. REACHED 8-30-92  
17. DATE COMPL. (Ready to prod.) 9-20-92  
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 5436' GR  
19. ELEV. CASINGHEAD 5438'

20. TOTAL DEPTH, MD & TVD 3900'  
21. PLUG, BACK T.D., MD & TVD 3880'  
22. IF MULTIPLE COMPL., HOW MANY\*  
23. INTERVALS DRILLED BY →  
24. ROTARY TOOLS 0 - TD  
25. CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
Dakota sand 3668-3707'

26. TYPE ELECTRIC AND OTHER LOGS RUN  
DIL/SFL LDT/CNL CBL 10-5-92

25. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8	24	338'	12 1/4	circ. to surface	
4 1/2	10 1/2	3900'	7 7/8	circ. to surface	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8	3710'	

31. PERFORATION RECORD (Interval, size and number)

3668'-3707' with 40 shots .38" nominal

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
3668-3707	68 bbls. 7.5%
3668-3703	70 Quality Foam Frac.
	53,000# sand, 420,000 scf Nitrogen

33.\* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
Jan. 20, 1993	Flowing	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
10/2/92	12	1/4"	→	None	1.75 MMCF	None	

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
845 Psi	845 psi	→		3.5 MMCF		

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  
Vented

TEST WITNESSED BY  
Dave Terrell

35. LIST OF ATTACHMENTS  
Electric logs, Cemeten bond log

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED [Signature] TITLE Geol. DATE Jan. 23, 1993

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 33.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29: "Sacks Cement":** Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES		38. GEOLOGIC MARKERS	
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Mancos Shale	Surface	3540'	gray shale
Dakota silt	3540'	3662'	dark gray shale, siltstone
Dakota sand	3662'	3755'	v. fine ss and interbedded shale
Cedar Mountain	3755'	3826'	Varicolored shale, fine ss
Morrison Fm.	3826'	TD	

NAME	MEAS. DEPTH	TOP

RECEIVED

REPORT OF WATER ENCOUNTERED DURING DRILLING - FORM 7 (1/89)

JAN 25 1993

DIVISION OF  
 OIL GAS & MINING

1. Well name and number: Federal 2-31  
 API number: 43-019-31323
2. Well location: QQ SWSE section 31 township 16S range 26E county Grand
3. Well operator: C.S.V. Oil Exploration Company  
 Address: 2005 South 300 West, Salt Lake City, Utah phone: 487-4721  
84115
4. Drilling contractor: Veeco Drilling, Inc.  
 Address: P. O. Box 1705 phone 303-242-6912  
Grand Junction, CO 81502

5. Water encountered (continue on reverse side if necessary)

Depth		Volume (flow rate or head)	Quality (fresh or salty)
from	to		
		No significant water was encountered in the well	

6. Formation tops:
- |                     |                |  |
|---------------------|----------------|--|
| <u>Mancos Shale</u> | <u>Surface</u> |  |
| <u>Dakota silt</u>  | <u>3540'</u>   |  |
| <u>Dakota Sand</u>  | <u>3662'</u>   |  |
| <u>Cedar Mt.</u>    | <u>3755'</u>   |  |
| <u>Morrison Fm.</u> | <u>3826'</u>   |  |

If an analysis has been made of the water encountered, please attach a copy of the report to this form.

I certify that this report is true and complete to the best of my knowledge.

Name Jan E. Callister Signature *Jan E. Callister*  
 Title Geologist Date January 23, 1993

Comments: