

UTAH AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG ELECTRIC LOGS FILE WATER SANDS LOCATION INSPECTED SUB. REPORT/abd.

* Change of Operator 7.1.85

DATE FILED 3-2-66

LAND: FEE & PATENTED STATE LEASE NO. PUBLIC LEASE NO. U-0807 INDIAN

DRILLING APPROVED: In Unit

SPUDED IN: 3-3-66

COMPLETED: 4-3-66 PUT TO PRODUCING: 4-4-66

INITIAL PRODUCTION: 434 BOPD, 220 MCFG/D

GRAVITY A.P.I. 28.6°

GOR: 502:1

PRODUCING ZONES: 5203'-20'

TOTAL DEPTH: 5287'

WELL ELEVATION: 4858'G, 4874'KB

DATE ABANDONED:

FIELD: Wonsits-Wonsits Valley

UNIT: Wonsits Valley

COUNTY: Uintah

WELL NO. WONSITS VALLEY UNIT FED. #66

APT 43-047-20042

LOCATION 610 FT. FROM (N)(S) LINE, 1989 FT. FROM (E) (W) LINE. SW SW SE ¹⁵/₄ - ¹/₄ SEC. 14

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR:
				8 S	21 E	14	CHEVLDN GULF OIL CORPORATION 66

GEOLOGIC TOPS:

Snake Tops

QUATERNARY	Star Point	Chinle	Molas
Alluvium	Wahweap	Shinarump	Manning Canyon
Lake beds	Masuk	Moenkopi	Mississippian
Pleistocene	Colorado	Sinbad	Humbug
Lake beds	Sego	PERMIAN	Brazer
TERTIARY	Buck Tongue	Kaibab	Pilot Shale
Pliocene	Castlegate	Coconino	Madison
Salt Lake	Mancos	Cutler	Leadville
Oligocene	Upper	Hoskinnini	Redwall
Norwood	Middle	DeChelly	DEVONIAN
Eocene	Lower	White Rim	Upper
Duchesne River	Emery	Organ Rock	Middle
Uinta	Blue Gate	Cedar Mesa	Lower
Bridger	Ferron	Halgaite Tongue	Ouray
Green River	Frontier	Phosphoria	Elbert
<i>Basal</i> 2200'	Dakota	Park City	McCracken
<i>E-5</i> 4300'	Burro Canyon	Rico (Goodridge)	Aneth
<i>E-2</i> 5132'	Cedar Mountain	Supai	Simonson Dolomite
<i>G-1</i> 5088'	Buckhorn	Wolfcamp	Sevy Dolomite
	JURASSIC	CARBONIFEROUS	North Point
	Morrison	Pennsylvanian	SILURIAN
Wasatch	Salt Wash	Oquirrh	Laketown Dolomite
Stone Cabin	San Rafael Gr.	Weber	ORDOVICIAN
Colton	Summerville	Morgan	Eureka Quartzite
Flagstaff	Bluff Sandstone	Hermosa	Pogonip Limestone
North Horn	Curtis		CAMBRIAN
Almy	Entrada	Pardox	Lynch
Paleocene	Moab Tongue	Ismay	Bowman
Current Creek	Carmel	Desert Creek	Tapeats
North Horn	Glen Canyon Gr.	Akah	Ophir
CRETACEOUS	Navajo	Barker Creek	Tintic
Montana	Kayenta		PRE-CAMBRIAN
Mesaverde	Wingate	Cane Creek	
Price River	TRIASSIC		
Blackhawk			

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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
Gulf Oil Corporation

3. ADDRESS OF OPERATOR
P. O. Box 1971, Casper, Wyoming 82601

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface **610' NSL, 1989' WEL (SW SE)** ✓
 At proposed prod. zone **SW**

5. LEASE DESIGNATION AND SERIAL NO.
U-0807

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
 -

7. UNIT AGREEMENT NAME
Monsits Valley

8. FARM OR LEASE NAME
Monsits Valley Fed. Unit

9. WELL NO.
66

10. FIELD AND POOL, OR WILDCAT
Monsits-Monsits Valley

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
14-05-21E S104N

12. COUNTY OR PARISH
Utah

13. STATE
Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) **610' South**

16. NO. OF ACRES IN LEASE
1280

17. NO. OF ACRES ASSIGNED TO THIS WELL
80 ✓

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. **App 1318' North**

19. PROPOSED DEPTH
5350'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
Ungraded ground 4858'

22. APPROX. DATE WORK WILL START*
March 4, 1966

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24#	300'	240 sacks ✓
7-7/8"	5-1/2"	14#	5350'	200 sacks ✓

We propose to drill 50' below base of 8-1. ✓

C.R
F.L

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. ORIGINAL SIGNED BY
 SIGNED **R. O. CHARLES** TITLE **Area Clerical Supervisor** DATE **March 1, 1966**

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

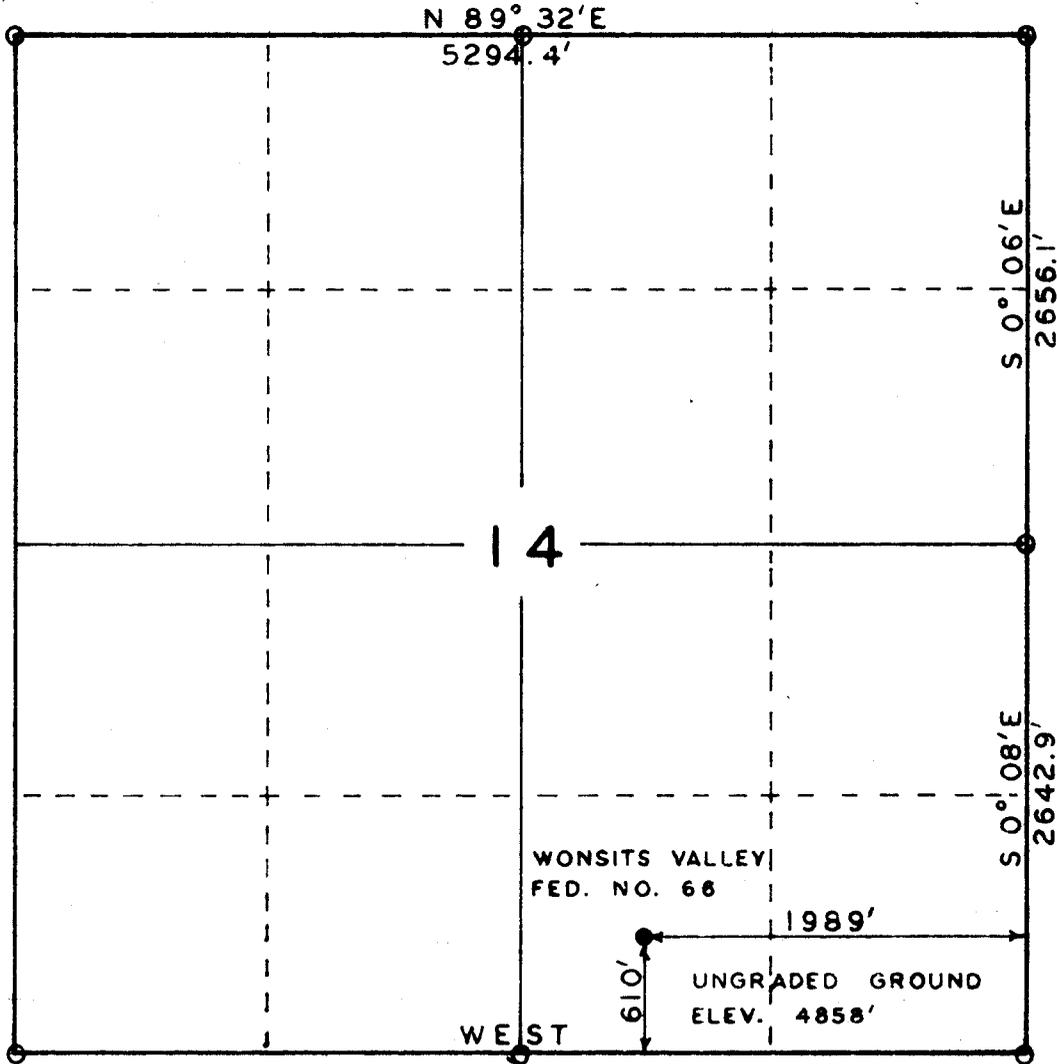
APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

cc: Utah 068 Cons. Comm. (2) ✓
 C. T. Gilbert (1)

*See Instructions On Reverse Side

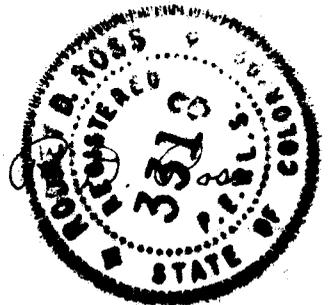
T 8 S, R 21 E, SLB & M



Scale: 1" = 1000'

0 - Corners Re-established

BY: ROSS CONSTRUCTION COMPANY
VERNAL, UTAH



PARTY R. D. ROSS
S. L. Cooper

SURVEY
GULF OIL CORPORATION
MONSITS VALLEY FEDERAL UNIT WELL NO. 66
LOCATED AS SHOWN IN SW $\frac{1}{4}$, SE $\frac{1}{4}$, SECTION 14,
T8S, R21E, SLB&M, UINTAH COUNTY, UTAH

DATE 2-25-66
REFERENCES DBGLO
Township Plat

WEATHER Clear-Warm

FILE GULF

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE
(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5

15

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

5. LEASE DESIGNATION AND SERIAL NO.

U-0807

6. IF INDIAN ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Wonsits Valley

8. FARM OR LEASE NAME

Wonsits Valley Fed. Unit

9. WELL NO.

66

10. FIELD AND POOL, OR WILDCAT

Wonsits-Wonsits Valley

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

14-85-21E

12. COUNTY OR PARISH

Uintah

13. STATE

Utah

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

b. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN OTHER Other _____

2. NAME OF OPERATOR
Gulf Oil Corporation

3. ADDRESS OF OPERATOR
P. O. Box 1971, Casper, Wyoming 82601

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)
At surface 610' NSL, 1989' WEL (SW SE)
At top prod. interval reported below
At total depth

14. PERMIT NO. DATE ISSUED

15. DATE SPUNDED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 19. ELEV. CASINGHEAD

3-3-66 3-15-66 4-3-66 4874' KB 4858' Gr

20. TOTAL DEPTH, MD & TVD 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY 24. ROTARY TOOLS 25. CABLE TOOLS

5287' 5260' → ALL -

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 25. WAS DIRECTIONAL SURVEY MADE

Basal Green River
6-1 5203' to 5220' No

26. TYPE ELECTRIC AND OTHER LOGS RUN 27. WAS WELL CORED

Induction-electrical, Microlog, Cement Bond No

28. 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#	291'	12-1/4"	200 sacks	
5-1/2"	14#	5286'	7-7/8"	225 sacks	

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-7/8"	5194'	

31. PERFORATION RECORD (Interval, size and number) 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

G, 5212' - 4-way tandem jet
DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED
6, 5212' 250 gallons 7-1/2% MCA.
Fracture treated with 598 barrels Ashley crude and 11,445# glass beads.

33.* PRODUCTION

DATE FIRST PRODUCTION 4-3-66 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Pumping 14 x 100" SPH, 2-1/4" bore pump WELL STATUS (Producing or shut-in) Producing

DATE OF TEST 4-4-66 HOURS TESTED 24 CHOKE SIZE PROD'N. FOR TEST PERIOD → OIL—BBL. 434 GAS—MCF. 220 WATER—BBL. 0 GAS-OIL RATIO 507

FLOW. TUBING PRESS. CASING PRESSURE CALCULATED 24-HOUR RATE → OIL—BBL. 434 GAS—MCF. 220 WATER—BBL. 0 OIL GRAVITY-API (CORR.) 28.6°

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY

Fuel & Sold T. A. Phillips

35. LIST OF ATTACHMENTS

Two logs each as listed in item No. 26.

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

SIGNED LESTER LeFAVOUR TITLE Area Production Manager DATE May 4, 1966

*(See Instructions and Spaces for Additional Data on Reverse Side)

cc: Utah O&G Cons. Comm. (2)

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 report 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 35.

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.)

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS	
				NAME	MEAS. DEPTH
				TOP	TRUE VERT. DEPTH
				Green River Basal Green River E-5 F-2 G-1	2200' 4302' 5032' 5088' 5183'

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

No water sands tested.

MAY 24 1966

Gulf Oil Corporation

CASPER PRODUCTION AREA

L. W. LeFavour
AREA PRODUCTION MANAGER
B. W. Miller
AREA EXPLORATION MANAGER

P. O. Box 1971
Casper, Wyo. 82601

May 4, 1966

United States Geological Survey (2)
8416 Federal Building
125 South State Street
Salt Lake City, Utah 84111

Utah Oil & Gas Conservation Commission (2)
348 East South Temple - Suite 301
Salt Lake City, Utah 84111

Re: Mousita Valley Federal Unit No. 66
SW SE Section 14-03-21E
Uintah County, Utah

Gentlemen:

We desire to keep all information confidential on the above-subject well.

Very truly yours,
Original Signed By
LESTER LeFAVOUR
Lester LeFavour

WJC:ajp



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

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 DEEPEN PATCH BACK DIFF. BEVER. Other _____

2. NAME OF OPERATOR
Gulf Oil Corporation

3. ADDRESS OF OPERATOR
P. O. Box 1971, Casper, Wyoming 82601

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)
At surface 610' NSL, 1989' WEL (SW SE)
At top prod. interval reported below
At total depth

CONFIDENTIAL

5. LEASE DESIGNATION AND SERIAL NO.

U-0807

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Wonsits Valley

8. FARM OR LEASE NAME

Wonsits Valley Fed. Unit

9. WELL NO.

66

10. FIELD AND POOL, OR WILDCAT

Wonsits-Wonsits Valley

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

14-8S-21E

12. COUNTY OR PARISH

Utah

13. STATE

Utah

15. DATE SPUNDED 3-3-66 16. DATE T.D. REACHED 3-15-66 17. DATE COMPL. (Ready to prod.) 4-3-66 18. ELEVATIONS (DP, RKB, RT, GR, ETC.)* 4874' KB 4858' Gr 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 5287' 21. PLUG, BACK T.D., MD & TVD 5260' 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY ROTARY TOOLS ALL CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* Basal Green River G-1 5203' to 5220' 25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN Induction-electrical, Microlog, Cement Bond 27. WAS WELL CORED No

28. 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#	291'	12-1/4"	200 sacks	
5-1/2"	14#	5286'	7-7/8"	225 sacks	

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-7/8"	5194'	

31. PERFORATION RECORD (Interval, size and number) 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

INTERVAL	SIZE	AMOUNT AND KIND OF MATERIAL USED
G, 5212' - 4-way tandem jet		250 gallons 7-1/2% MCA. Fracture treated with 598 barrels Ashley crude and 11,445# glass beads.

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)					
4-3-66	Pumping 14 x 100" SPM, 2-1/4" bore pump	Producing					
DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
4-4-66	24		→	434	220	0	507
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
		→	434	220	0	28.6°	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Fuel & Sold TEST WITNESSED BY T. A. Phillips

35. LIST OF ATTACHMENTS Two logs each as listed in Item No. 26.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.
Original Signed By SIGNED LESTER LEFLOUR TITLE Area Production Manager DATE May 4, 1966

*(See Instructions and Spaces for Additional Data on Reverse Side)

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 23, 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 35.

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 pool.

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.)

INFORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
<p>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</p>			
<p>38. GEOLOGIC MARKERS</p>			
	NAME	NEAR. DEPTH	TRUE VERT. DEPTH
	Green River	2200'	
	Basal Green River	4302'	
	E-5	5032'	
	F-2	5088'	
	G-1	5183'	

WATER ANALYSIS
NORTHERN REGION DENVER TECHNICAL CENTER

SAMPLE I.D.:

CHEVRON UNIT, WONSITS VALLEY
 UINTAH COUNTY, UT
PRODUCED INJECTION WATER

03-12-86

SAMPLE NUMBER: 01W1958

MAJOR ANIONS			MAJOR CATIONS		
	MG/L	MEQ/L		MG/L	MEQ/L
CL	19100.00	538.8	NA	12300.00	535.1
BR	112.00	1.4			
I	28.50	.2			
SO4	78.70	1.6	CA	131.00	6.5
HCO3	1060.00	17.4	MG	44.40	3.7
CO3	0.00	0.0	K	60.60	1.5
OH	0.00	0.0	SR	90.60	2.1
SUM=			SUM=		
.559.4			548.9		

ANION/CATION QC (DIFF/SUM) = (.0096)

TDS BY ADDITION (IONS ANALYZED) = 33005.0 MG/L

MEAS. RES. @ 77 F = .109 OHM-M CALC. RES. @ 77 F = .193 OHM-M

MEAS. RES. @ 166 F = .094 OHM-M

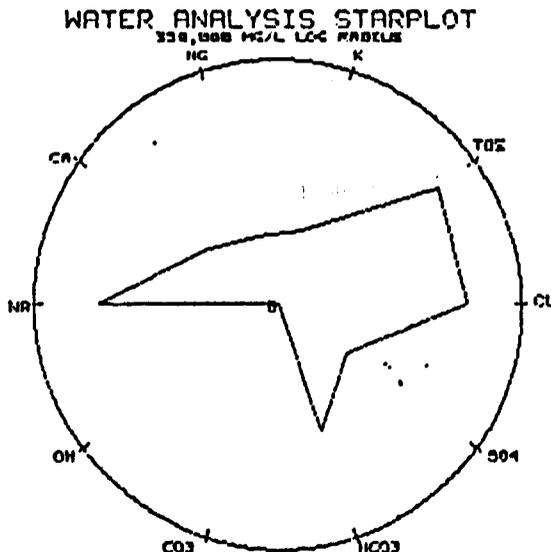
MEAS. SP. GRAV. = 1.021 G/ML CALC. SP. GRAV. = 1.023 G/ML

PH OF UNACIDIFIED SAMPLE @ 25 C = 7.88 UNITS

A VALUE OF 0 INDICATES <NONE DETECTED>

TRACE ELEMENTS WILL NOT BE COMPLETED AT THIS TIME

NITRATE = 0 MG/L



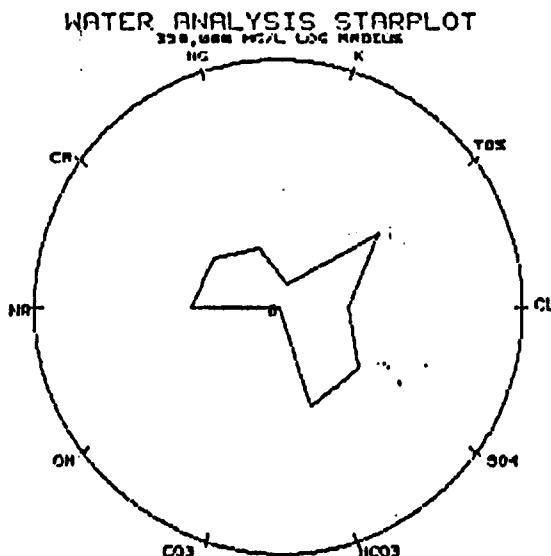
WATER ANALYSIS
NORTHERN REGION DENVER TECHNICAL CENTER

SAMPLE I.D.:
 CHEVRON UNIT, WONSITS VALLEY
 UINTAH COUNTY, UT.
FRESH INJ WATER
 03-12-86

SAMPLE NUMBER: 01W1960

MAJOR ANIONS	MG/L	MEQ/L	MAJOR CATIONS	MG/L	MEQ/L
CL	35.10	1.0	NA	102.00	4.4
BR	0.00	0.0			
I	.20	0.0			
SO4	180.00	3.7	CA	70.70	3.5
HCO3	201.00	3.3	MG	25.40	2.1
CO3	0.00	0.0	K	2.60	.1
OH	0.00	0.0	SR	0.00	0.0
		SUM= 8.0		SUM= 10.1	

ANION/CATION QC (DIFF/SUM) = [-.1150]
 TDS BY ADDITION (IONS ANALYZED) = 617 MG/L
 MEAS. RES. @ 77 F = 16.064 OHM-M CALC. RES. @ 77 F = 11.5 OHM-M
 MEAS. RES. @ 166 F = 6.131 OHM-M
 MEAS. SP. GRAV. = 1.004 G/ML CALC. SP. GRAV. = 1 G/ML
 PH OF UNACIDIFIED SAMPLE @ 25 C = 7.99 UNITS
 A VALUE OF 0 INDICATES <NONE DETECTED>
 TRACE ELEMENTS WILL NOT BE COMPLETED AT THIS TIME
 NITRATE = 0 MG/L



WATER ANALYSIS
NORTHERN REGION DENVER TECHNICAL CENTER

SAMPLE I.O.:

CHEVRON UNIT, WONSITS VALLEY
UINTAH COUNTY, UT.
MIXED PROD AND FRESH INJECTION WATER.
03-12-06

SAMPLE NUMBER:01W1959

MAJOR ANIONS			MAJOR CATIONS		
	MG/L	MEQ/L		MG/L	MEQ/L
CL	11900.00	335.7	NA	7780.00	338.4
BR	59.70	.7			
I	10.10	.1			
SO4	202.00	4.2	CA	111.00	5.5
HCO3	805.00	13.2	MG	33.30	2.7
CO3	0.00	0.0	K	40.40	1.0
OH	0.00	0.0	SR	47.60	1.1
SUM= 353.9			SUM= 348.8		

ANION/CATION QC (DIFF/SUM) = [.0073]

TDS BY ADDITION (IONS ANALYZED) = 20989.1 MG/L

MEAS. RES. @ 77 F = .279 OHM-M CALC. RES. @ 77 F = .296 OHM-M

MEAS. RES. @ 166 F = .146 OHM-M

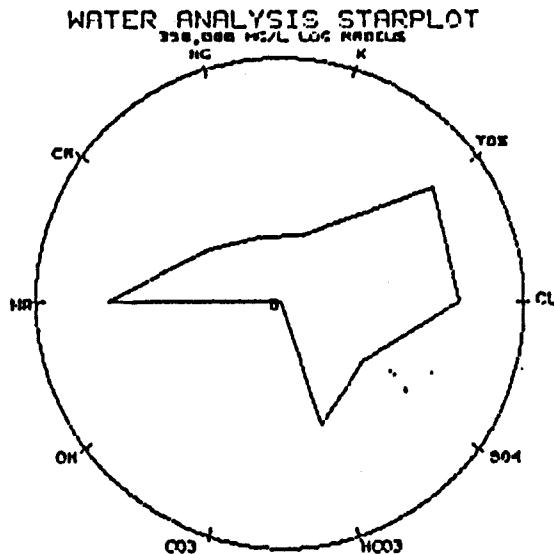
MEAS. SP. GRAV. = 1.016 G/ML CALC. SP. GRAV. = 1.015 G/ML

PH OF UNACIDIFIED SAMPLE @ 25 C = 8.11 UNITS

A VALUE OF 0 INDICATES <NONE DETECTED>

TRACE ELEMENTS WILL NOT BE COMPLETED AT THIS TIME

NITRATE = 0 MG/L



WONSITS VALLEY UNIT #66

KB = 4874'

GL = 4858'

LOCATION = SEC. 14, T8S, R21E
UINTAH COUNTY, UTAH

PROPOSED P&A

8-5/8", 24#, Grade J casing set @ 291' w/200 sxs. regular of cement.

Bottom of top job @ 660'

Top squeeze @ 1900'

Bottom squeeze @ 2500'

Top of cement @ 4310'

5-1/2", 14#, Grade J casing set @ 5289' w/225 sxs. of cement.

Bottom plug @ 350'

CICR @ 2100'

Squeeze holes @ 2200'

CICR @ 5000'

5102'-10' (F2)

5204'-20' (G1)

PBTD @ 5260'

TD @ 5287'

Revised PA Schematic showing squeeze across Uinta - Green River interface @ 2200'

*JTC
6/5/89*

Completion Date: 4/66'

Well Type: Oil Producer

Drawn By: Bill Mansfield

Date Prepared: 5-17-89

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460



PLUGGING AND ABANDONMENT PLAN

NAME AND ADDRESS OF FACILITY Wonsits Valley Federal Unit P. O. Box 455 Vernal, UT 84078	NAME AND ADDRESS OF OWNER/OPERATOR Chevron U.S.A. Inc. P. O. Box 599 Denver, CO 80201
---	---

LOCATE WELL AND OUTLINE UNIT ON SECTION PLAT — 640 ACRES 	STATE	COUNTY	PERMIT NUMBER
	UT	Uintah	
	SURFACE LOCATION DESCRIPTION		
	NE 1/4 OF SW 1/4 OF SE 1/4 SECTION 14 TOWNSHIP 8S RANGE 21E		
LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT			
Surface Location <u>610</u> ft. from (N/S) <u>S</u> Line of quarter section and <u>1989</u> ft. from (E/W) <u>E</u> Line of quarter section			
TYPE OF AUTHORIZATION		WELL ACTIVITY	
<input checked="" type="checkbox"/> Individual Permit <input type="checkbox"/> Area Permit <input type="checkbox"/> Rul.		<input type="checkbox"/> CLASS I <input checked="" type="checkbox"/> CLASS II <input type="checkbox"/> Brine Disposal <input checked="" type="checkbox"/> Enhanced Recovery <input type="checkbox"/> Hydrocarbon Storage <input type="checkbox"/> CLASS III	
Number of Wells <u>1</u>		Well Number #66	
Lease Name Wonsits Valley Federal Unit			

CASING AND TUBING RECORD AFTER PLUGGING	METHOD OF EMPLACEMENT OF CEMENT PLUGS															
<table border="1" style="width:100%"> <thead> <tr> <th>SIZE</th> <th>WT(LB/FT)</th> <th>TO BE PUT IN WELL (FT)</th> <th>TO BE LEFT IN WELL (FT)</th> <th>HOLE SIZE</th> </tr> </thead> <tbody> <tr> <td>8-5/8"</td> <td>24</td> <td>-</td> <td>291</td> <td>12-1/4"</td> </tr> <tr> <td>5-1/2"</td> <td>14</td> <td>-</td> <td>5286</td> <td>7-7/8"</td> </tr> </tbody> </table>	SIZE	WT(LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE	8-5/8"	24	-	291	12-1/4"	5-1/2"	14	-	5286	7-7/8"	<input checked="" type="checkbox"/> The Balance Method for Plug #3 <input type="checkbox"/> The Dump Bailer Method <input type="checkbox"/> The Two-Plug Method <input checked="" type="checkbox"/> Other squeeze thru CICR's for Plugs #1 and #2
SIZE	WT(LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE												
8-5/8"	24	-	291	12-1/4"												
5-1/2"	14	-	5286	7-7/8"												

CEMENTING TO PLUG AND ABANDON DATA:	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	5-1/2	5-1/2	5-1/2				
Depth to Bottom of Tubing or Drill Pipe (ft.)	5000	2900	350				
Sacks of Cement To Be Used (each plug)	100	100	50				
Slurry Volume To Be Pumped (cu. ft.)	134	134	67				
Calculated Top of Plug (ft.)	5000'	2900'	Surface				
Measured Top of Plug (if tagged ft.)							
Slurry Wt. (Lb./Gal.)	14.8	14.8	14.8				
Type Cement or Other Material (Class III)	G	G	G				

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (If any)			
From	To	From	To

Estimated Cost to Plug Wells
\$30,000

CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

NAME AND OFFICIAL TITLE (Please type or print)	SIGNATURE	DATE SIGNED

R 21 E

R 22 E

TYPE LOG
GULF OIL CORP.
FED. UNIT # 10
NE SW 12-21E-8S

T 7 S

T 7 S

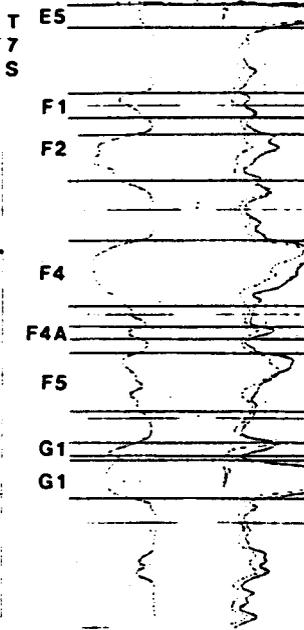
WONSITS UNIT

RED WASH FIELD

WONSITS VALLEY FEDERAL UNIT

WHITE

RIVER



LEGEND

- ACTIVE PATTERNS
- APPROVED PATTERNS
- 1988 PROPOSED PATTERNS
- 1989 DEVELOPMENT WELLS

T 8 S

T 8 S

GYPSUM HILLS UNIT

ANTELOPE

DRAM

UNIT

GYPSUM HILLS FIELD

- WATER INJECTION
- T.A. INJECTION
- PROPOSED CONVERSION TO INJECTION
- PROD.
- T.A. PROD.
- P.A.

R 21 E

R 22 E

ATTACHMENT B1

WONSITS VALLEY FEDERAL UNIT	
WELL STATUS	
T.A. 1987	JANUARY 1988

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APR 25 1985

SUNDRY NOTICES AND REPORTS ON WELLS

DIVISION OF (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

GAS & MINING

1. oil well gas well other

2. NAME OF OPERATOR
GULF OIL CORPORATION ATTN R.W.HUWALDT

3. ADDRESS OF OPERATOR
P O BOX 2619, CASPER, WY 82602 2619

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE:
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>		<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>		<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>		<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>		<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>		<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>		<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>		<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>		<input type="checkbox"/>
(other) Blanket Sundry			

5. LEASE
U-0806

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Wonsit Valley

8. FARM OR LEASE NAME
Wonsits Valley Unit St/Fed

9. WELL NO.
#66

10. FIELD OR WILDCAT NAME
Wonsits Valley

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
85. 21E. 14

12. COUNTY OR PARISH: 13. STATE
Uintah Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

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.)*

Per conversation between K. S. Aslesen & J. Sparger, on March 27, 1985, Temporary lined work pits will be used for all future casing repair work.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED J. R. Bucek TITLE AREA ENGINEER DATE APR 19 1985

J. R. BUCEK (This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

Gulf Oil Exploration and Production Company

L. G. Rader
PRODUCTION MANAGER - CASPER AREA

July 2, 1985

P. O. Box 2619
Casper, WY 82602

State of Utah
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

RECEIVED

JUL 05 1985

Gentlemen:

DIVISION OF OIL
GAS & MINING

Effective July 1, 1985, the corporate name of Gulf Oil Corporation was changed to Chevron U.S.A. Inc. This will be applicable to all operations, agreements, contracts, documents, and permits of Gulf Oil Corporation in the area of and/or under your jurisdiction.

The attached information is being furnished to facilitate the name change of appropriate records under your authority, and submitted as our understanding of the procedure required to accomplish the change.

Please advise this office or the office listed on the attachments should additional information be needed.

Sincerely,



L. G. Rader

KWR/mdb

Attachments





Chevron U.S.A. Inc.

6400 South Fiddler's Green Circle, Englewood, CO 80111, P. O. Box 599, Denver, CO 80201

February 14, 1989

G. H. Thomas
Division Production Manager

Wonsits Valley Federal Unit
WVFU #66
Uintah County, Utah
Permit Application
Underground Injection Control

Mr. Max Dodson, Director
Water Management Division
Environmental Protection Agency
EPA Region VIII
One Denver Plaza, Suite 500
999 - 18th Street
Denver, CO 80202-2405

RECEIVED
JUL 19 1989

DIVISION OF
OIL, GAS & MINING

Dear Mr. Dodson:

Chevron U.S.A. Inc. is the operator of the Wonsits Valley Federal Unit. As operator, Chevron solicits your approval of the attached permit application to convert the WVFU #66 well to water injection service. The well will be a Class II R enhanced recovery well. The well will be converted to injection in order to increase the ultimate oil recovery of the Unit. Chevron is a major oil and gas producing, refining, and marketing company that operates both domestically and internationally. This permit requires a statement of financial responsibility in order to insure that the subject well and all wells will be properly plugged and abandoned. Chevron will submit a statement to qualify all the wells contained within the Wonsits Valley Federal Unit.

Your approval for the conversion of this well to injection is requested. Should you have questions regarding this permit application package, please contact J. T. Conley at (303) 930-3313 or at the letterhead address.

Yours very truly,

JTC:maw
Attachment

For...

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

I. EPA ID NUMBER

4



UNDERGROUND INJECTION CONTROL PERMIT APPLICATION

(Collected under the authority of the Safe Drinking Water Act, Sections 1421, 1422, 40 CFR 144)

UIC

	T/A	C
U		

READ ATTACHED INSTRUCTIONS BEFORE STARTING FOR OFFICIAL USE ONLY

Application approved mo day year	Date Received mo day year	Permit/Well Number	Comments

II. FACILITY NAME AND ADDRESS

Facility Name
Wonsits Valley Federal Unit

Street Address
P. O. Box 455

City
Vernal

State
UT

ZIP Code
84078

III. OWNER/OPERATOR AND ADDRESS

Owner/Operator Name
Chevron U.S.A. Inc.

Street Address
P. O. Box 599

City
Denver

State
CO

ZIP Code
80201

IV. OWNERSHIP STATUS (Mark 'x')

A. Federal B. State C. Private

D. Public E. Other (Explain)

V. SIC CODES

1311

VI. WELL STATUS (Mark 'x')

A. Operating

Date Started
mo dev year

B. Modification/Conversion C. Proposed

VII. TYPE OF PERMIT REQUESTED (Mark 'x' and specify if required)

A. Individual B. Area

Number of Existing wells: 0 Number of Proposed wells: 1

Name(s) of field(s) or project(s)
Wonsits Valley Federal Unit Well #66

VIII. CLASS AND TYPE OF WELL (see reverse)

A. Class(es) (enter code(s)): 2

B. Type(s) (enter code(s)): R

C. If class is "other" or type is code 'x,' explain

D. Number of wells per type (if area permit)

IX. LOCATION OF WELL(S) OR APPROXIMATE CENTER OF FIELD OR PROJECT

A. Latitude												B. Longitude				Township and Range				X. INDIAN LANDS (Mark 'x')															
Deg			Min			Sec			Deg			Min			Sec			Twp		Range		Sec		1/4 Sec		Feet from		Line		Feet from		Line		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
40			7			6			109			31			6			8S		21E		14		SE		610'		SL		1989'		EL			

XI. ATTACHMENTS

(Complete the following questions on a separate sheet(s) and number accordingly; see instructions)

FOR CLASSES I, II, III (and other classes) complete and submit on separate sheet(s) Attachments A — U (pp 2-6) as appropriate. Attach maps where required. List attachments by letter which are applicable and are included with your application:

XII. CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

A. Name and Title (Type or Print)	B. Phone No. (Area Code and No.)
C. Signature	D. Date Signed

Underground Injection Control
Permit Application

Wonsits Valley Federal Unit
WVFU #66

A. AREA OF REVIEW:

The area of review is a 1/4 mile radius around the proposed injection well. See Attachment A.

B. MAPS OF WELLS/AREA OF REVIEW:

Maps of the area are shown as two attachments, B1 and B2.

C. CORRECTIVE ACTION PLAN AND WELL DATA:

Well Data shown as Attachment C. No corrective action plan required.

D. MAPS AND CROSS SECTIONS OF USDW'S:

Does not apply to Class II injection wells.

E. NAME AND DEPTH OF USDW'S (Class II):

There are no known USDW's in the area. There are no water withdrawal wells in the area.

F. MAPS AND CROSS SECTIONS OF GEOLOGIC STRUCTURE OF AREA:

Does not apply to Class II wells.

G. GEOLOGICAL DATA ON INJECTION AND CONFINING ZONES (Class II):

Green River Lithology: Laminated sandstone and limestone intervals. The injection zone is from 5102' to 5220'.

Geological Name: Green River Formation.

Gross Formation Thickness: The Green River formation top is at 2200'. The gross formation thickness is at least 3087'.

Depth: The Green River formation top is at 2200'. This well does not penetrate the entire Green River interval. The exact bottom of the interval is not known.

Fracture Pressure: The fracture pressure of the interval is approximately 3600 psi.

H. OPERATING DATA:

1.) Average Injection Rate: 2000 BWIPD

Maximum Injection Rate: 4000 BWIPD

2.) Average Injection Pressure: 1000 psi

Maximum Injection Pressure: 2000 psi

3.) Annulus fluid is produced water with a corrosion inhibitor added to prevent corrosion of the tubulars.

4.) Does not apply.

5.) The injected fluid is a combination of the produced Green River water and water taken from the supply wells. The supply wells produce water from the Uintah sand which is below the water table of the Green River. These supply wells are located approximately two miles from the Wonsits Valley Unit northern boundary. See Attachment H1, H2, and H3 for water analysis.

6.) Does not apply.

Underground Injection Control
Permit Application

Wonsits Valley Federal Unit
WVFU #66

I. FORMATION TESTING PROGRAM:

The fluid pressure is monitored by way of surface gauges. The injection pressure is recorded monthly. The injection well will be logged at least once a year to allocate the injection into the zones and to check for equipment integrity and channeling. The injected water is analyzed periodically for chemical composition. The physical characteristics of the injection zone is not expected to change over time.

J. STIMULATION PROGRAM:

Both of the target injection zones will be acidized with a 15% concentration of HCl acid in order to remove damage and increase injectivity.

K. INJECTION PROCEDURES:

The injected fluid is charged through a pump located at the central water injection station. The charged fluid travels through a steel flowline to the injection wellhead and is directed downhole.

L. Does not apply.

M. CONSTRUCTION DETAILS:

See Attachment M.

N. Does not apply.

O. PLANS FOR WELL FAILURES:

Upon the discovery of a mechanical integrity failure, the well will be shut-in and either repaired or plug and abandoned.

P. MONITORING PROGRAM:

The well injection and casing pressures are recorded monthly in order to monitor the integrity of the tubulars. In addition, radioactive tracer surveys are run annually to check for zone isolation and to allocate the injected fluid.

Q. PLUGGING AND ABANDONMENT PLAN:

See Attachment Q, EPA Form 7520-14.

R. NECESSARY RESOURCES:

Chevron U.S.A. Inc. will submit a financial statement covering the operations for the entire Wonsits Valley Federal Unit area as well as for this single well application.

S. AQUIFER EXEMPTIONS:

The Green River formation is not a USDW. The formation contains water which has a TDS of approximately 33,000 mg/l. See Attachment

Underground Injection Control
Permit Application

Wonsits Valley Federal Unit
WVFU #66

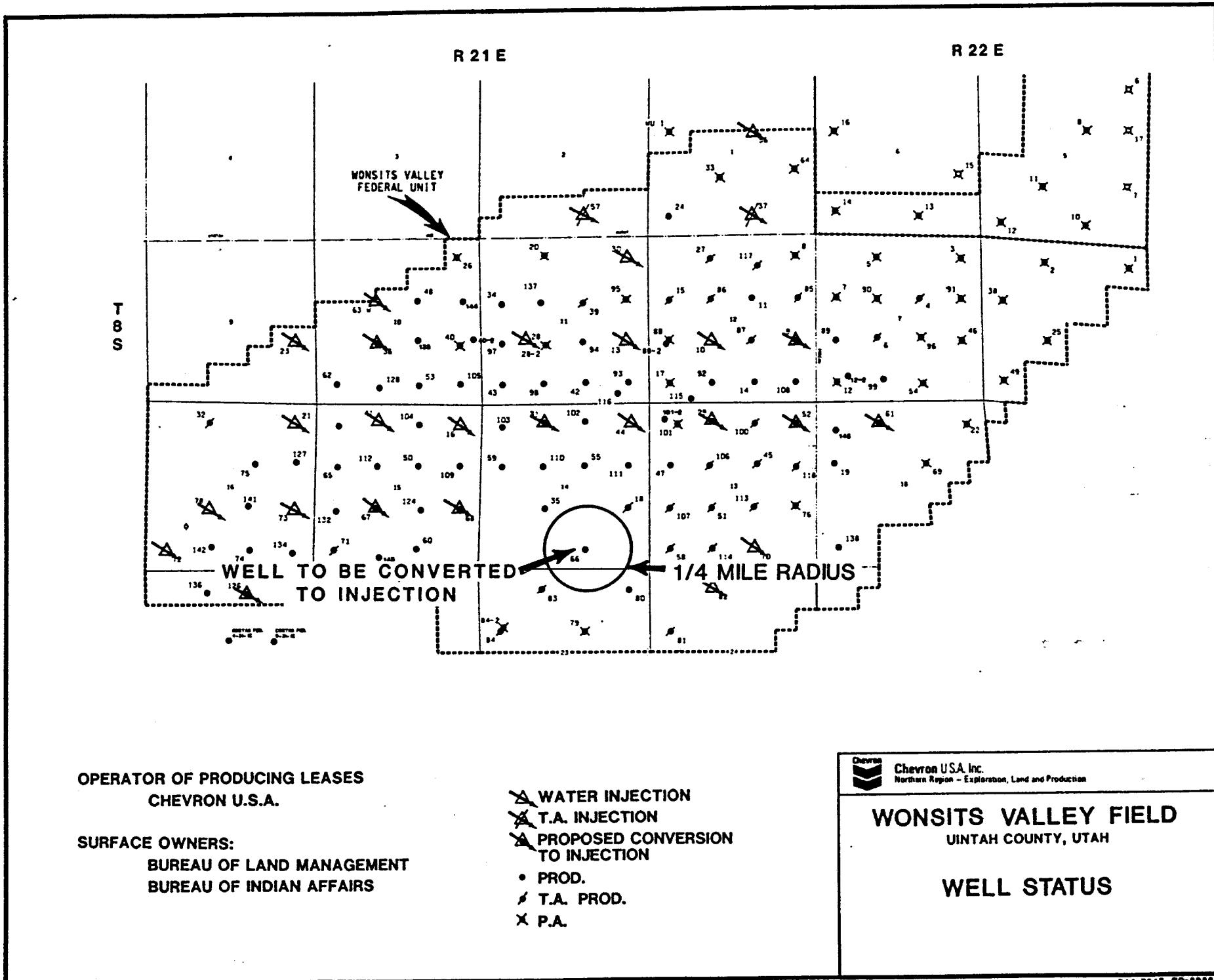
H1 for water analysis.

T. EXISTING EPA PERMITS:

No known EPA permits.

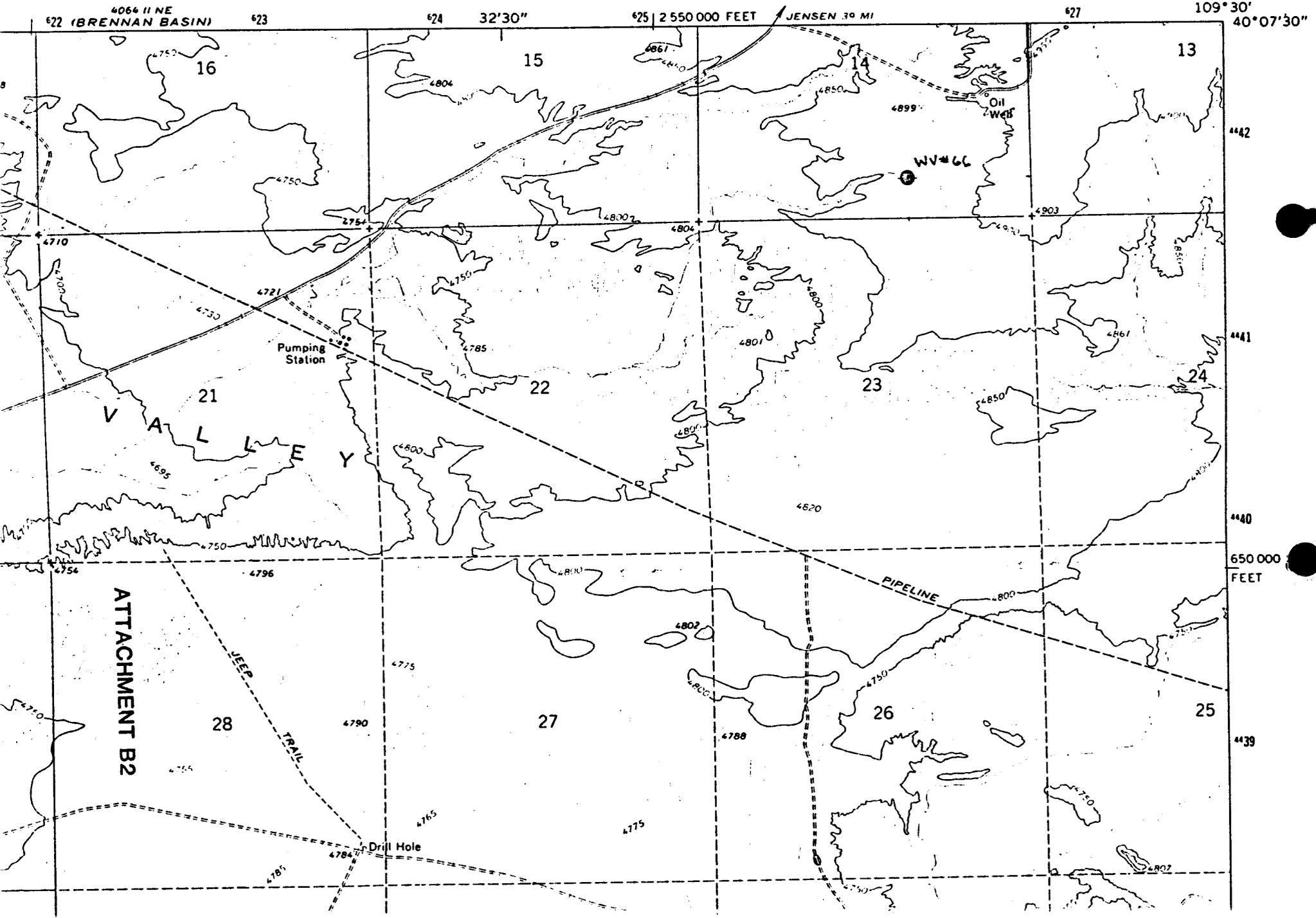
U. DESCRIPTION OF BUSINESS:

Chevron U.S.A. Inc is a major oil and gas producing company that operates in both domestically and internationally.



WVFU #66: SWSE S14-T83-R21E

OURAY SE QUADRANGLE
UTAH-UINTAH CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other Instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.

U-0807

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug a well. All rights reserved.
Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED
AUG 24 1989

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Chevron U.S.A. Inc., Room 13097

3. ADDRESS OF OPERATOR
P.O. Box 599, Denver, CO 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

610' FSL & 1,989' FEL SW 1/4 SE 1/4

14. PERMIT NO.
43-047-20042

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
4,874' KB

7. UNIT AGREEMENT NAME

Wonsits Valley
8. FARM OR LEASE NAME
Wonsits Valley Federal Unit

9. WELL NO.
#66

10. FIELD AND POOL, OR WILDCAT
Wonsits-Wonsits Valley

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

Sec. 14, T8S, R21E

12. COUNTY OR PARISH 13. STATE
Uintah Utah

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF PULL OR ALTER CASING
FRACTURE TREAT MULTIPLE COMPLETE
SHOOT OR ACIDIZE ABANDON*
REPAIR WELL CHANGE PLANS
(Other) Convert to water injector

SUBSEQUENT REPORT OF:

WATER SHUT-OFF REPAIRING WELL
FRACTURE TREATMENT ALTERING CASING
SHOOTING OR ACIDIZING ABANDONMENT*
(Other)
(NOTE: Report results of multiple completion on Well Completion or Recompletion 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.)*

It is proposed to convert this SI producer to a water injection well as follows:

- MIRU. ND tree. NU & tst BOPE. POOH w/tbg & pkr.
- C/O w/bit & scraper to PBD @ 5,260'.
- Perf 5,204'-5,220 G-1 and 5,102'-5,110' F-2.
- Acidize perfs 5,204'-5,220' w/1200 gals 15% HCL. Swab back acid.
- Acidize perfs 5,102'-5,110' w/800 gals 15% HCL. Swab perfs.
- Hydrotest in hole w/production tbg. Lnd tbg.
- ND BOPE. NU & tst WH. Set pkr.
- Tst annulus to 1,000 psi f/UIC compliance.
- RD MOL. TWOTP.

OIL AND GAS	
DRN	RJF
JRB	GLH
DTS	SLS
2-TAS	
3- MICROFILM	
4- FILE	

3- BLM
3- State
1- EEM
1- MKD
2- Drlg.
1- File

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

SIGNED J. S. Watson TITLE Technical Assistant DATE 8-21-89

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____
CONDITIONS OF APPROVAL, IF ANY:

Federal Approval of this
Action is Necessary

*See Instructions on Reverse Side

Accepted by the State
of Utah Division of
Oil, Gas and Mining
Date: 8-31-89
By: [Signature]



State of Utah
 DEPARTMENT OF NATURAL RESOURCES
 DIVISION OF OIL, GAS AND MINING

file
 4320960000
 8 5
 2 12
 17

Norman H. Bangerter
 Governor
 Dee C. Hansen
 Executive Director
 Dianne R. Nielson, Ph.D.
 Division Director

355 West North Temple
 3 Triad Center, Suite 350
 Salt Lake City, Utah 84180-1203
 801-538-5340

December 28, 1989

commenced March 1 1990

Mr. Max H. Dodson, Director
 Water Management Division
 U.S. Environmental Protection Agency
 999 18th Street, Suite 500
 Denver, Colorado 80202-2405

Dear Mr. Dodson:

Re: Final Permit for the Wonsits Valley Federal Unit #66, EPA Permit #UTS249420042, Uintah County, Utah

The Division has reviewed the Final Underground Injection Control (UIC) Permit, Responsiveness Summaries, and the Addendum to the Statement of Basis for the Chevron U.S.A. Inc. Wonsits Valley Federal #66 enhanced recovery injection well. This letter will serve to advise EPA that the Division has no further comments.

We appreciate the responsiveness EPA has shown in considering the comments from the Division and Chevron and incorporating the appropriate changes in the final permit. The Division encourages EPA to waive the remaining delay period and permit Chevron to commence conversion.

Please contact Gil Hunt at (801)538-5340 if you have any questions on this action.

Best regards,

Dianne R. Nielson
 Director

ldc
 cc: Chevron U.S.A., Inc.
 WVU66



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter

Governor

Dee C. Hansen

Executive Director

Dianne R. Nielson, Ph.D.

Division Director

355 West North Temple

3 Triad Center, Suite 350

Salt Lake City, Utah 84180-1203

801-538-5340

gil
4320000000

December 28, 1989

Mr. Max H. Dodson, Director
Water Management Division
U.S. Environmental Protection Agency
999 18th Street, Suite 500
Denver, Colorado 80202-2405

Dear Mr. Dodson:

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Please contact Gil Hunt at (801)538-5340 if you have any questions on this action.

Best regards,

Dianne R. Nielson
Director

ldc

cc: Chevron U.S.A., Inc.

WVU66

orig UIC file
route through
RT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII

999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2405

DEC 12 1989

RECEIVED
DEC 15 1989

DIVISION OF
OIL, GAS & MINING

Ref: 8WM-DW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ms. Dianne R. Nielson, Director
State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

RE: UNDERGROUND INJECTION CONTROL (UIC)
Final Permit for the Wonsits Valley
Federal Unit #66
EPA Permit #UTS249420042
Uintah County, Utah

Dear Ms. Nielson:

Enclosed are a Final Underground Injection Control (UIC) Permit, Responsiveness Summaries, and Addendum to the Statement of Basis for the Chevron U. S. A. Inc. Wonsits Valley Federal Unit #66 enhanced recovery injection well.

The public comment period for the proposed action ended September 15, 1989. There were substantial comments from Chevron and the State of Utah. All comments were considered when preparing the final permit package. The final permit becomes effective thirty (30) days from the date of issuance. During this thirty (30) day delay, Chevron and the State of Utah have an opportunity to comment on the changes. If the Environmental Protection Agency (EPA) receives letters from Chevron U.S.A. Inc. and the State of Utah within this thirty (30) day delay, waiving their opportunity to comment further, the EPA will waive the remaining delay period and permit Chevron to commence conversion.

If you have any questions on this action, please contact Emmett Schmitz at (303) 293-1717.

Sincerely,

Max H. Dodson
Director
Water Management Division

Enclosures



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2405

UNDERGROUND INJECTION CONTROL PROGRAM

Final Permit
Class II Enhanced Recovery
Permit #UTS249420042

Well Name: Wonsits Valley Federal Unit #66
Field Name: Wonsits Valley Federal Unit
County & State: Uintah County, Utah

Issued to:

Chevron U. S. A. Inc.
P.O. Box 599
Denver, CO 80201

Date Prepared: October 1989

TABLE OF CONTENTS

TITLE SHEET	1
TABLE OF CONTENTS	2
PART I. AUTHORIZATION TO CONVERT AND INJECT	4
PART II. SPECIFIC PERMIT CONDITIONS	6
A. WELL CONVERSION REQUIREMENTS	6
1. <u>Casing and Cementing</u>	6
2. <u>Tubing and Packer Specifications</u>	6
3. <u>Monitoring Devices.</u>	6
4. <u>Proposed Changes and Workovers</u>	6
5. <u>Formation Testing.</u>	7
6. <u>Postponement of Conversion</u>	7
B. CORRECTIVE ACTION	7
C. WELL OPERATION	7
1. <u>Prior to Commencing Injection</u>	7
2. <u>Mechanical Integrity (Subsequent to Initial Demonstration)</u>	8
3. <u>Injection Interval</u>	9
4. <u>Injection Pressure Limitation</u>	10
5. <u>Injection Volume Limitation</u>	11
6. <u>Injection Fluid Limitation</u>	11
7. <u>Annular Fluid</u>	11
D. MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS	11
1. <u>Injection Well Monitoring Program</u>	11
2. <u>Monitoring Information</u>	12
3. <u>Recordkeeping</u>	12
4. <u>Reporting of Results</u>	13
E. PLUGGING AND ABANDONMENT	13
1. <u>Notice of Plugging and Abandonment</u>	13
2. <u>Plugging and Abandonment Plan</u>	13
3. <u>Cessation of Injection Activities</u>	13
4. <u>Plugging and Abandonment Report</u>	14
F. FINANCIAL RESPONSIBILITY	14
1. <u>Demonstration of Financial Responsibility</u>	14
2. <u>Insolvency of Financial Institution</u>	15
3. <u>Cancellation of Demonstration by Financial Institution</u>	15

PART III. GENERAL PERMIT CONDITIONS	16
A. EFFECT OF PERMIT	16
B. PERMIT ACTIONS	16
1. <u>Modifications, Reissuance, or Termination</u>	16
2. <u>Conversions</u>	16
3. <u>Transfers</u>	17
C. SEVERABILITY	17
D. CONFIDENTIALITY	17
E. GENERAL DUTIES AND REQUIREMENTS	17
1. <u>Duty to Comply</u>	17
2. <u>Penalties for Violations of Permit Conditions</u>	17
3. <u>Need to Halt or Reduce Activity not a Defense</u>	18
4. <u>Duty to Mitigate</u>	18
5. <u>Proper Operation and Maintenance</u>	18
6. <u>Duty to Provide Information</u>	18
7. <u>Inspection and Entry</u>	18
8. <u>Records of Permit Application</u>	19
9. <u>Signatory Requirements</u>	19
10. <u>Reporting of Noncompliance</u>	19
APPENDIX A (Conversion Plan)	21
APPENDIX B (Reporting Forms)	24
APPENDIX C (Plugging Plan)	30

PART I. AUTHORIZATION TO CONVERT AND INJECT

Pursuant to the Underground Injection Control Regulations of the U. S. Environmental Protection Agency codified at Title 40 of the Code of Federal Regulations, Parts 124, 144, 146, and 147,

Chevron U. S. A. Inc.

P. O. Box 599

Denver, Colorado 80201

is hereby authorized to convert and inject into the Class II injection well, known as the Wonsits Valley Federal Unit #66 (WVFU #66), located 610 feet from the south line and 1989 feet from the east line, (SW 1/4 of the SE 1/4), of Section 14, Township 8 South, Range 21 East, Uintah County, Utah. The WVFU #66 is also located within the Uintah & Ouray Indian Reservation.

Injection shall be for the purpose of injecting water produced from the Green River Formation, and additional water from the stratigraphically younger and shallower Uintah Formation, in accordance with conditions set forth herein.

All conditions set forth herein refer to Title 40 Parts 124, 144, 146, and 147 of the Code of Federal Regulations and are regulations that are in effect on the date that this permit becomes effective.

This permit consists of a total of 33 pages and includes all items listed in the Table of Contents. Further, it is based upon representations made by the permittee and on other information contained in the administrative record.

This permit and the authorization to inject are issued for the operating life of the well, unless terminated (Part III, Section B), or except upon automatic expiration due to prolonged postponement of conversion (Part II, Section A. 6.). The permit will be reviewed by EPA at least every five (5) years to determine whether action under 40 CFR 144.36 (a) is warranted.

The permit will expire upon delegation of primary enforcement responsibility for the UIC Program to the State of Utah, Division of Oil, Gas, and Mining, or the Uintah & Ouray Indian Reservation, unless either the State or the Indian Reservation have adequate authority, and choose to adopt and enforce this permit as a State or Indian Reservation permit.

Issued this 21st day of November, 1989.

This permit shall become effective December 21, 1989


* Max H. Dodson
Director
Water Management Division

* NOTE: The person holding this title is referred to as the "Director" throughout this permit.

PART II. SPECIFIC PERMIT CONDITIONS

A. WELL CONVERSION REQUIREMENTS

1. Casing and Cementing. The conversion details submitted with the application are hereby incorporated into this permit as Appendix A, and shall be binding on the permittee. Cement bonds between the wellbore and casings are as follow: (1) cement extends from the base of the 8-5/8 inch surface casing (291 feet KB) to the surface; and (2) the 5-1/2 inch longstring is set at 5286 feet (KB). The 5-1/2 inch casing was cemented with 225 sacks of Class "G" cement. By bond log the top of the cement is approximately 4310 feet (KB).

2. Tubing and Packer Specifications. A tubing of two and seven-eighths (2-7/8) inches diameter is to be utilized and will be set at a depth of approximately 5000 feet (KB). The depth to packer setting is a predicted value, therefore the permittee is required to set the packer at a distance of no more than 125 feet above the top of the perforations. Injection between the outermost casing protecting underground sources of drinking water (USDW's) and the wellbore is prohibited.

3. Monitoring Devices. The operator shall provide and maintain in good operating condition:

- (a) a tap on the injection line between the storage tank(s) and the injection well for collection of a representative sample of injection fluids;
- (b) Three (3) one-half (1/2) inch Female Iron Pipe (FIP) fittings, isolated by plug or globe valves, and located at the wellhead on the tubing, on the tubing/casing annulus, and on the 8-5/8 inch and 5-1/2 inch casing annulus, and positioned to allow attachment of 1/2 inch Male Iron Pipe (MIP) gauges.
- (c) a flow meter with a cumulative volume recorder that is certified for 95 percent accuracy or more throughout the range of injection rates allowed by the permit.

4. Proposed Changes and Workovers. The permittee shall give advance notice to the Director, as soon as possible, of any planned physical alterations or additions to the permitted facility. Major alterations or workovers of the permitted well shall meet all conditions as set forth in this permit. A major alteration/workover shall be considered any work performed which affects casing, packer(s), or tubing. In addition, the permittee shall provide all records of well workovers, logging, or other test data to EPA within sixty (60) days of completion of the activity. Appendix B contains samples of the appropriate

reporting forms.

Demonstration of mechanical integrity shall be performed within thirty (30) days of completion of workovers/alterations and prior to resuming injection activities, in accordance with Part II. Section C. 1. (c).

5. Formation Testing. The permittee shall measure the formation pore pressure prior to beginning injection, ((40 CFR 146.22 (g)(1)). Chevron will be required to demonstrate the absence of interzonal flow behind the casing, for the interval 291 to 2665 feet, using an "oxygen activation" (Hydrolog) tool. No additional logging will be required.

6. Postponement of Conversion. If the well is not converted within one (1) year from the effective date of this permit, the permit will automatically expire unless the permittee requests an extension. The written request shall be made to the Director, in lieu of the annual reporting requirements of Part II, Section D. 4., and shall state the reasons for the delay in conversion and confirm the protection of all USDW's. The extension under this section may not exceed one (1) year. Financial responsibility shall be maintained during the period of inactivity in accordance with Part II, Section F. Once a permit expires under this part, the full permitting process, including opportunity for public comment, must be repeated before authorization to inject will be re-issued.

B. CORRECTIVE ACTION

No corrective action is required. There are no wells in the 1/4-mile area of review.

C. WELL OPERATION

1. Prior to Commencing Injection. Injection operations may not commence until the permittee has complied with (a) and (b) as follows:

- (a) Conversion is complete, and the permittee has submitted a Well Rework Record (Form 7520-12) in Appendix B; and
 - (i) The Director has inspected or otherwise reviewed the new injection well and finds it is in compliance with the conditions of the permit; or
 - (ii) The permittee has not received notice from the Director of his or her intent to inspect or

otherwise review the new injection well within thirteen (13) days of the date of the Well Rework Record in paragraph (a) of this permit condition in which case prior inspection or review is waived and the permittee may commence injection. (Note: However, in all circumstances, item (b) below must also be satisfied.).

- (b) The permittee demonstrates that the well has mechanical integrity in accordance with 40 CFR 146.8 and paragraph (a), below, and has received notice from the Director that such a demonstration is satisfactory. The permittee shall notify EPA thirty (30) days prior to conducting this test so that a representative may be present to observe the test. Results of the test shall be submitted to the Director as soon as possible but no later than thirty (30) days after the demonstration; and

2. Mechanical Integrity

- (a) Method of Demonstrating Mechanical Integrity.
A demonstration of the absence of significant leaks in the casing, tubing and/or packer must be made by performing a tubing/casing annulus pressure test. This test shall be for a minimum of forty-five (45) minutes at: (1) a pressure of 300 pounds per square inch gauge (psig) measured at the surface, if the well is shut-in; or (2) a pressure differential of 200 psig, if injection activities are continued during the test. The tubing/casing annulus shall be filled with a non-corrosive fluid (either a non-toxic liquid or the injection fluid) at least twenty-four (24) hours in advance of the test. Pressure values shall be recorded at five (5) minute intervals or less. A well passes the mechanical integrity test if there is less than a ten (10) percent decrease/increase in pressure over the forty-five (45) minute period.

- (b) Schedule for Demonstration of Mechanical Integrity. Subsequent to initial.
A demonstration of mechanical integrity shall be made no less frequently than every five (5) years from the effective date of the permit, in accordance with 40 CFR 146.8 and paragraph (a) above, unless otherwise modified. Mechanical integrity monitoring will be according to the following provisions:

- (i) It shall be the permittee's responsibility to

arrange and conduct daily observations. At least one (1) observation of tubing/casing and long string/surface casing annulus pressures, each, shall be recorded at regular intervals no greater than once a month. Observed values for annulus pressures shall be recorded in accordance with Part II. Section D. 1. (c), and reported in accordance with Part II. Section D. 4.

(ii) In addition to any demonstration made under paragraph (i) above, the Director may require a demonstration of mechanical integrity, as described in Part II. Section C. 1. (c) at any time during the permitted life of the well.

(c) Loss of Mechanical Integrity. If the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity as defined by 40 CFR 146.8 becomes evident during operation (such as evidence of pressure in the annulus), the permittee shall notify the Director in accordance with Part III, Section E. 10. of this permit. Furthermore, injection activities shall be terminated immediately; and operation shall not be resumed until the permittee has taken necessary actions to restore integrity to the well and EPA gives approval to recommence injection.

3. Injection Interval. Injection shall be limited to the zone known as the Green River Formation in the subsurface perforated intervals 5102 - 5110 feet and 5204 - 5220 feet KB.

4. Injection Pressure Limitation.

(a) Injection pressure, measured at the surface, shall not exceed 1500 pounds per square inch gauge (psig).

(b) The pressure limit in paragraph (a) may be increased by the Director if the fracture pressure of the injection formation will not be exceeded, and the permittee demonstrates either:

(i) that the proposed increase in surface injection pressure is necessary to overcome friction losses in the injection system. This demonstration shall be made by performing a step rate test, using fluid normally injected, to determine both the instantaneous shut-in pressure and the formation breakdown pressure. The Director will determine any allowable

increase based upon the test results and other parameters reflecting actual injection operations, or

- (ii) that the proposed increase in surface injection pressure is necessary to inject the volume rate of fluid set by Part II, Section C. 5., below. The demonstration required under this paragraph will be based on the specific injection operation.
- (c) The permittee shall give thirty (30) days advance notice to the Director if the increase in paragraph (b) will be sought. Details of the proposed test shall be submitted at least seven (7) days in advance of the proposed test date so that the Director has adequate time to review and approve the test procedures. Results of all tests shall be submitted to the Director within 10 days of the test. Injection at the increased pressure must be approved by the Director, in writing, before the permittee may begin continuous operation at that pressure.
- (d) Any approval granted by the Director for the increased pressure limitations as stated in paragraph (b) shall be made part of this permit by minor modification without further opportunity for public comment.
- (e) Any request to inject at pressures in excess of the formation fracture pressure will be processed for permit modification according to 40 CFR Sections 124.5 and 144.39, and there will be opportunity for public comment on the proposed modification.

5. Injection Volume Limitation. There is no limitation on the number of barrels of water per day (BWPD) of fluid from the Green River Formation, and additional water from the stratigraphically younger and shallower, Uintah Formation that shall be injected into this well, provided that in no case shall injection pressure exceed that limit shown in Part II. Section C. 4. of this permit.

6. Injection Fluid Limitation. The permittee shall not inject any hazardous substances, as defined by 40 CFR 261, at any time during the operation of the facility; and further, no substances other than water as defined in the permit application shall be injected.

7. Annular Operation. The annulus between the tubing and the casing shall be filled with fresh water treated with a

corrosion inhibitor or other fluid as approved, in writing, by the Director. The annulus pressure shall be maintained at zero (0) psig.

D. MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS

1. Injection Well Monitoring Program. Samples and measurements shall be representative of the monitored activity. The permittee shall utilize the applicable analytical methods described in Table 1 of 40 CFR 136.3, or in Appendix III of 40 CFR Part 261, or in certain circumstances, by other methods that have been approved by the EPA Administrator. Monitoring shall consist of:

- (a) Analysis of the injection fluids, performed:
 - (i) annually for Total Dissolved Solids, pH, Specific Conductivity, and Specific Gravity; and
 - (ii) whenever there is a change in the source of injection fluids a comprehensive water analysis shall be submitted to the Director within thirty (30) days of any change in injection fluids.
- (b) Weekly observations of flow rate and cumulative volume. At least one observation of flow rate, and cumulative volume, each, shall be recorded at regular intervals no greater than thirty (30) days.
- (c) Daily injection and annuli pressure observations of the 2-7/8 inch tubing, the 2-7/8 inch tubing/5-1/2 inch casing annulus, and the 5-1/2 inch longstring/8-5/8 inch surface casing annulus, and record at least one of each, once per month.

2. Monitoring Information. Records of any monitoring activity required under this permit shall include:

- (a) The date, exact place, the time of sampling or field measurements;
- (b) The name of the individual(s) who performed the sampling or measurements;
- (c) The exact sampling method(s) used to take samples;
- (d) The date(s) laboratory analyses were performed;

- (e) The name of the individual(s) who performed the analyses;
- (f) The analytical techniques or methods used by laboratory personnel; and
- (g) The results of such analyses.

3. Recordkeeping.

- (a) The permittee shall retain records concerning:
 - (i) the nature and composition of all injected fluids until three (3) years after the completion of plugging and abandonment which has been carried out in accordance with the Plugging and Abandonment Plan shown in Appendix C, and is consistent with 40 CFR 146.10.
 - (ii) all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit for a period of at least five (5) years from the date of the sample, measurement or report throughout the operating life of the well.
- (b) The permittee shall continue to retain such records after the retention period specified in paragraphs (a) (i) and (a) (ii) unless he delivers the records to the Director or obtains written approval from the Director to discard the records.
- (c) The permittee shall maintain copies (or the originals) of all pertinent records at the office of Chevron U. S. A. Inc., 6400 South Fiddler's Green Circle, Englewood, CO 80111

4. Reporting of Results. The permittee shall submit an Annual Report to the Director summarizing the results of the monitoring required by Part II, Section D. 1. (a) and (b) of this permit. Copies of all monthly records on injected fluids, and any major changes in characteristics or sources of injected fluid shall be included in the Annual Report. The first Annual Report shall cover the period from the effective date of the permit through December 31. Subsequently, the Annual Report shall cover the period from January 1 through December 31, and shall be submitted by January 31 of the following year. Appendix B contains Form 7520-11 which may be copied and used to submit the

annual summary of monitoring.

E. PLUGGING AND ABANDONMENT

1. Notice of Plugging and Abandonment. The permittee shall notify the Director forty-five (45) days before conversion, workover, or abandonment of the well.

2. Plugging and Abandonment Plan. The permittee shall plug and abandon the well as provided in the Plugging and Abandonment Plan, Appendix C. This plan incorporates information supplied by the permittee, and additional requirements specified by the EPA. EPA reserves the right to change the manner in which the well will be plugged if the well is modified during its permitted life or if the well is not made consistent with EPA requirements for construction and mechanical integrity. The Director may ask the permittee to update the estimated plugging cost periodically. Such estimates shall be based upon costs which a third party would incur to plug the well according to the plan.

3. Cessation of Injection Activities. After a cessation of operations of two (2) years, the permittee shall plug and abandon the well in accordance with the Plugging and Abandonment Plan, unless he:

- (a) has provided notice to the Director; and
- (b) has demonstrated that the well will be used in the future; and
- (c) has described actions or procedures, satisfactory to the Director, that will be taken to ensure that the well will not endanger underground sources of drinking water during the period of temporary abandonment.

4. Plugging and Abandonment Report. Within sixty (60) days after plugging the well, the permittee shall submit a report on Form 7520-13 to the Director. The report shall be certified as accurate by the person who performed the plugging operation and the report shall consist of either:

- (1) a statement that the well was plugged in accordance with the plan; or
- (2) where actual plugging differed from the plan, a statement that specifies the different procedures followed.

F. FINANCIAL RESPONSIBILITY

1. Demonstration of Financial Responsibility. The permittee is required to maintain financial responsibility and resources to close, plug and abandon the injection well as provided in the plugging and abandonment plan.

- (a) The permittee shall submit financial statements and other information annually, or as required by EPA, in order to demonstrate that its financial position remains sound, and that it continues to have adequate financial resources, as determined by EPA, to close, plug, and abandon the injection well in accordance with the approved plugging and abandonment plan.
- (b) If financial statements or other information indicate that the permittee no longer has financial resources, according to EPA criteria, to assure that the injection well will be properly plugged and abandoned, then the permittee must make an alternate showing of financial responsibility. This showing must be acceptable to the Director and must be submitted within sixty (60) days after having been notified by EPA of the necessity for making an alternate showing of financial responsibility.
- (b) The permittee upon his own initiative and upon written request to EPA, may change the financial responsibility mechanism. Any such change must be approved by the Director. A minor permit modification will be made to reflect any change in financial mechanisms, without further opportunity for public comment.

2. Insolvency of Financial Institution. The permittee must submit an alternative demonstration of financial responsibility acceptable to the Director, within sixty (60) days after either of the following events occur:

- (a) the institution issuing the trust or financial instrument files for bankruptcy; or
- (b) the authority of the trustee institution to act as trustee, or the authority of the institution issuing the financial instrument, is suspended or revoked.

3. Cancellation of Demonstration by Financial Institution.
The permittee must submit an alternative demonstration of financial responsibility acceptable to the Director, within sixty (60) days after the institution issuing the trust or financial instrument serves 120-day notice to the EPA of their intent to cancel the trust or financial instrument.

PART III. GENERAL PERMIT CONDITIONS

A. EFFECT OF PERMIT

The permittee is allowed to engage in underground injection in accordance with the conditions of this permit. The permittee, as authorized by this permit, shall not construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR, Part 142 or otherwise adversely affect the health of persons. Any underground injection activity not authorized in this permit or otherwise authorized by permit or rule is prohibited. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any enforcement action brought under the provisions of Section 1431 of the Safe Drinking Water Act (SDWA) or any other law governing protection of public health or the environment for any imminent and substantial endangerment to human health, or the environment, nor does it serve as a shield to the permittee's independent obligation to comply with all UIC regulations.

B. PERMIT ACTIONS

1. Modifications, Reissuance, or Termination. The Director may, for cause or upon a request from the permittee, modify, revoke and reissue, or terminate this permit in accordance with 40 CFR Sections 124.5, 144.12, 144.39, and 144.40. Also, the permit is subject to minor modifications for cause as specified in 40 CFR Section 144.41. The filing of a request for a permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of the permittee does not stay the applicability or enforceability of any permit condition.

2. Conversions. The Director may, for cause or upon a request from the permittee allow conversion of the well from a Class II injection well to a non-Class II well. Requests to convert the injection well from its Class II status to a non-Class II well, such as a production well, must be made in writing to the Director. Conversion may not proceed until a permit modification indicating the conditions of the proposed conversion is received by the permittee. Conditions of the modification may include such items as, demonstration of mechanical integrity, and well specific monitoring and reporting following the conversion.

In the case of conversion back to an oil or gas well, monitoring and reporting will be for a period of not less than six (6) months during which period the permittee will submit to this EPA office copies of not less than six (6) consecutive monthly reports as submitted to the State of Utah Oil, Gas, and Mining Division. Following conversion to a production well the permittee will maintain financial responsibility to plug and abandon the WVFU #66. Once these requirements of conversion to a non-Class II well are met the EPA will remove the WVFU #66 from the UIC inventory list.

3. Transfers. This permit is not transferrable to any person except after notice is provided to the Director and the requirements of 40 CFR 144.38 are complied with. The Director may require modification, or revocation and reissuance, of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the SDWA.

C. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

D. CONFIDENTIALITY

In accordance with 40 CFR Part 2 and 40 CFR 144.5, any information submitted to EPA pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

- The name and address of the permittee, and
- Information which deals with the existence, absence or level of contaminants in drinking water.

E. GENERAL DUTIES AND REQUIREMENTS

1. Duty to Comply. The permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance constitutes a violation of the SDWA and is grounds for enforcement action, permit termination, revocation

and reissuance, or modification. Such noncompliance may also be grounds for enforcement action under the Resource Conservation and Recovery Act (RCRA).

2. Penalties for Violations of Permit Conditions. Any person who violates a permit requirement is subject to civil penalties, fines, and other enforcement action under the SDWA and may be subject to such actions pursuant to the RCRA. Any person who willfully violates permit conditions may be subject to criminal prosecution.

3. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

5. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

6. Duty to Provide Information. The permittee shall furnish the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

7. Inspection and Entry. The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of

this permit;

- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (d) Sample or monitor, at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the SDWA any substances or parameters at any location.

8. Records of Permit Application. The permittee shall maintain records of all data required to complete the permit application and any supplemental information submitted for a period of five (5) years from the effective date of this permit. This period may be extended by request of the Director at any time.

9. Signatory Requirements. All reports or other information requested by the Director shall be signed and certified according to 40 CFR 144.32.

10. Reporting of Noncompliance.

- (a) Anticipated Noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (b) Compliance Schedules. Reports of compliance or noncompliance with or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than thirty (30) days following each schedule date.
- (c) Twenty four Hour Reporting.
 - (i) The permittee shall report to the Director any noncompliance which may endanger health or the environment. Information shall be provided orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances by telephoning EPA at (303) 293-1413 (during normal business hours) or at (303) 293-1788 (for reporting at all other times). The following information shall be included in the verbal report:

(A) Any monitoring or other information which

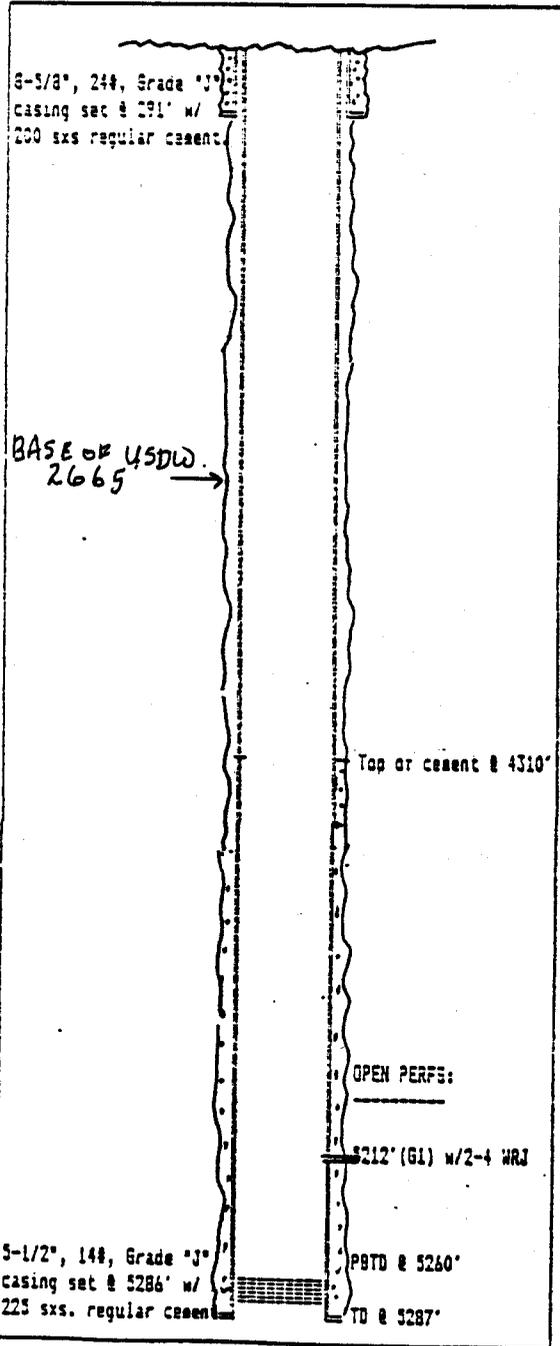
indicates that any contaminant may cause endangerment to an underground source of drinking water.

- (B) Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water.
- (ii) A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- (d) Other Noncompliance. The permittee shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted. The reports shall contain the information listed in Part III, Section E. 10. (C) (ii) of this permit.
- (e) Other Information. Where the permittee becomes aware that he failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Director, the permittee shall submit such correct facts or information within two (2) weeks of the time such information became known to him.

APPENDIX A (Conversion Plan)

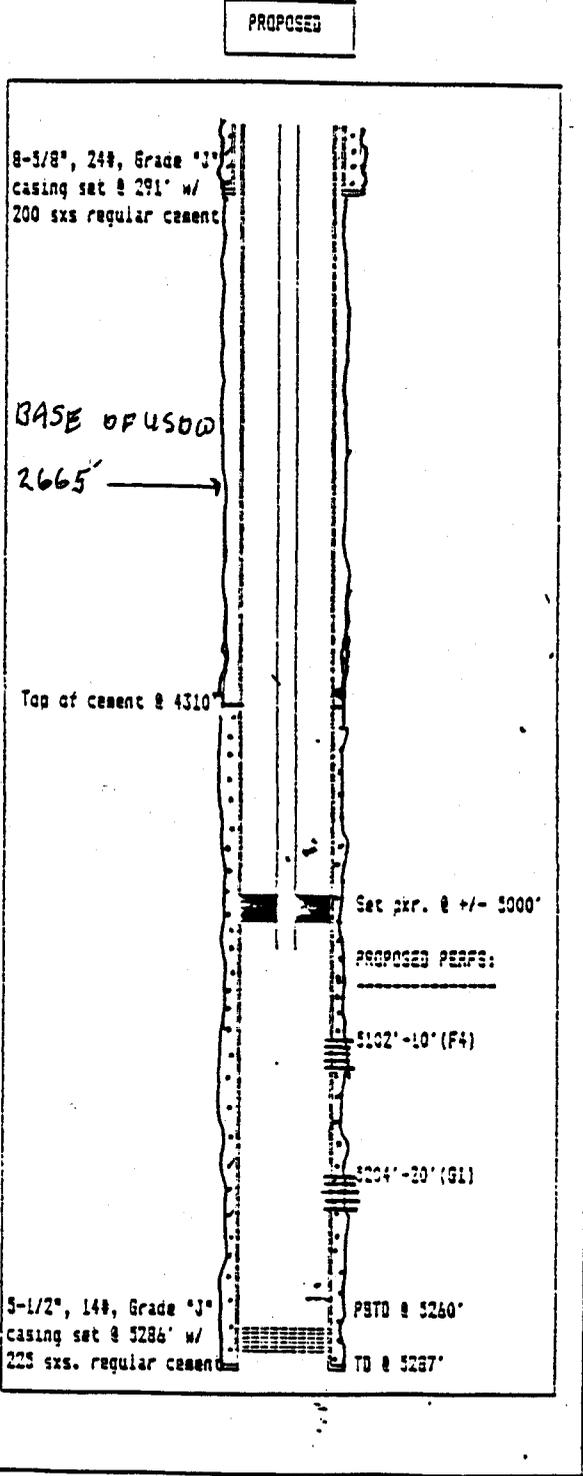
Field: WONSITS VALLEY UNIT	GL: 4659' XB: 4674'	Current Status: SI OIL PRODUCER
Well Name: WVU #66	TD: 5287' PBTD: 5260'	Proposed Status: INJECTOR
Location: Sec. 14, T-8S, R-21E UINTAH COUNTY, UTAH		

CURRENT



Prepared By: BILL HANSFIELD Date Prepared: 1/12/89

Field: MONSIEUR VALLEY UNIT	GL: 4853' KB: 4874'	Current Status: SI OIL WELL
Well Name: WVU #66	TD: 5237' PBTD: 5250'	Proposed Status: INJECTOR
Location: Sec. 14, T-25, R-21E UINTAH COUNTY, UTAH		



ATTACHMENT M

APPENDIX B (Reporting Forms)

EPA Form 7520 -7: Application to Transfer Permit
EPA Form 7520-10: Well Completion Report
EPA Form 7520-11: Annual Well Monitoring Report
EPA Form 7520-12: Well Rework Record
EPA Form 7520-13: Plugging Record

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

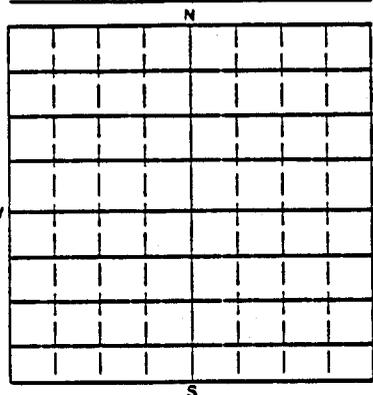


APPLICATION TO TRANSFER PERMIT

NAME AND ADDRESS OF EXISTING PERMITTEE

NAME AND ADDRESS OF SURFACE OWNER

LOCATE WELL AND OUTLINE UNIT ON SECTION PLAT — 640 ACRES



STATE _____ COUNTY _____ PERMIT NUMBER _____

SURFACE LOCATION DESCRIPTION
 1/4 OF _____ 1/4 OF _____ 1/4 SECTION _____ TOWNSHIP _____ RANGE _____

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT
 Surface Location _____ ft. from (N/S) _____ Line of quarter section
 and _____ ft. from (E/W) _____ Line of quarter section

- | | | | |
|--|--|-------------------------------------|--|
| WELL ACTIVITY | | WELL STATUS | TYPE OF PERMIT |
| <input type="checkbox"/> Class I | <input type="checkbox"/> Operating | <input type="checkbox"/> Individual | <input type="checkbox"/> Area
Number of Wells _____ |
| <input type="checkbox"/> Class II | <input type="checkbox"/> Modification/Conversion | | |
| <input type="checkbox"/> Brine Disposal | <input type="checkbox"/> Proposed | | |
| <input type="checkbox"/> Enhanced Recovery | | | |
| <input type="checkbox"/> Hydrocarbon Storage | | | |
| <input type="checkbox"/> Class III | | | |
| <input type="checkbox"/> Other | | | |

Lease Name _____ Well Number _____

NAME(S) AND ADDRESS(ES) OF NEW OWNER(S)

NAME AND ADDRESS OF NEW OPERATOR

Attach to this application a written agreement between the existing and new permittee containing a specific date for transfer of permit responsibility, coverage, and liability between them.

The new permittee must show evidence of financial responsibility by the submission of surety bond, or other adequate assurance, such as financial statements or other materials acceptable to the director.

CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

NAME AND OFFICIAL TITLE (Please type or print)

SIGNATURE

DATE SIGNED



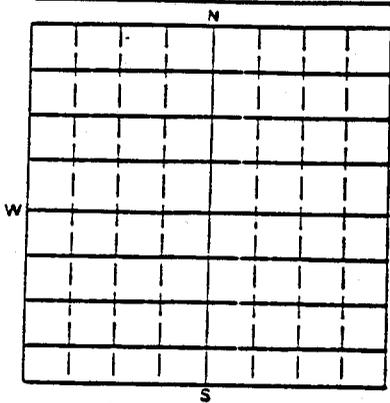
**COMPLETION REPORT FOR BRINE DISPOSAL,
HYDROCARBON STORAGE, OR ENHANCED RECOVERY WELL**

Form Approved
OMB No. 2040-0042
Approval expires 9-30-91

NAME AND ADDRESS OF EXISTING PERMITTEE

NAME AND ADDRESS OF SURFACE OWNER

LOCATE WELL AND OUTLINE UNIT ON
SECTION PLAT — 640 ACRES



STATE

COUNTY

PERMIT NUMBER

SURFACE LOCATION DESCRIPTION

1/4 OF

1/4 OF

1/4 SECTION

TOWNSHIP

RANGE

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface Location ____ ft. from (N/S) ____ Line of quarter section
and ____ ft. from (E/W) ____ Line of quarter section

WELL ACTIVITY

TYPE OF PERMIT

- Brine Disposal Individual
 Enhanced Recovery Area
 Hydrocarbon Storage Number of Wells ____

Estimated Fracture Pressure
of Injection Zone

Anticipated Daily Injection Volume (Bbls)

Injection Interval

Average

Maximum

Feet

to Feet

Anticipated Daily Injection Pressure (PSI)

Depth to Bottom of Lowermost Freshwater Formation
(Feet)

Average

Maximum

- Type of Injection Fluid (Check the appropriate block(s))
- Salt Water Brackish Water Fresh Water
 Liquid Hydrocarbon Other

Lease Name

Well Number

Name of Injection Zone

Date Drilling Began

Date Well Completed

Permeability of Injection Zone

Date Drilling Completed

Porosity of Injection Zone

CASING AND TUBING

CEMENT

HOLE

OD Size

Wt/Ft — Grade — New or Used

Depth

Secks

Class

Depth

Bit Diameter

INJECTION ZONE STIMULATION

WIRE LINE LOGS. LIST EACH TYPE

Interval Treated

Materials and Amount Used

Log Types

Logged Intervals

Complete Attachments A — E listed on the reverse.

CERTIFICATION

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NAME AND OFFICIAL TITLE (Please type or print)

DATE SIGNED



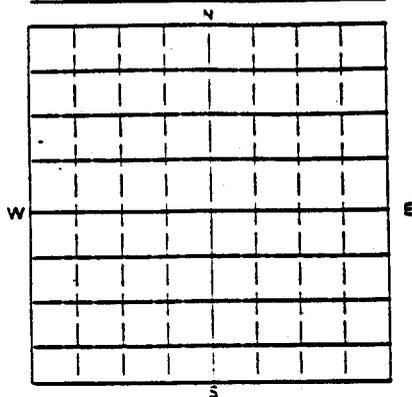
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

NAME AND ADDRESS OF EXISTING PERMITTEE

NAME AND ADDRESS OF SURFACE OWNER

LOCATE WELL AND OUTLINE UNIT ON SECTION PLAT — 640 ACRES



STATE

COUNTY

PERMIT NUMBER

SURFACE LOCATION DESCRIPTION

¼ OF ¼ OF ¼ SECTION TOWNSHIP RANGE

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface Location _____ ft. from (N/S) _____ Line of quarter section

and _____ ft. from (E/W) _____ Line of quarter section

WELL ACTIVITY

TYPE OF PERMIT

- Brine Disposal
- Enhanced Recovery
- Hydrocarbon Storage

- Individual
- Area
- Number of Wells _____

Lease Name

Well Number

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING — CASING ANNULUS PRESSURE (OPTIONAL MONITORING)

MONTH	YEAR	INJECTION PRESSURE		TOTAL VOLUME INJECTED		TUBING — CASING ANNULUS PRESSURE (OPTIONAL MONITORING)	
		AVERAGE PSIG	MAXIMUM PSIG	BBL	MCF	MINIMUM PSIG	MAXIMUM PSIG

CERTIFICATION

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NAME AND OFFICIAL TITLE (Please type or print)

SIGNATURE

DATE SIGNED



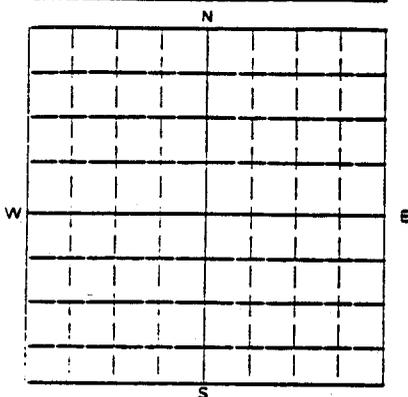
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

WELL REWORK RECORD

NAME AND ADDRESS OF PERMITTEE

NAME AND ADDRESS OF CONTRACTOR

LOCATE WELL AND OUTLINE UNIT ON SECTION PLAT — 840 ACRES



STATE _____ COUNTY _____ PERMIT NUMBER _____

SURFACE LOCATION DESCRIPTION
 . OF ¼ OF ¼ SECTION TOWNSHIP RANGE

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface Location _____ ft. from (N/S) _____ Line of quarter section
 and _____ ft. from (E/W) _____ Line of quarter section

WELL ACTIVITY <input type="checkbox"/> Brine Disposal <input type="checkbox"/> Enhanced Recovery <input type="checkbox"/> Hydrocarbon Storage Lease Name _____	Total Depth Before Rework _____	TYPE OF PERMIT <input type="checkbox"/> Individual <input type="checkbox"/> Area Number of Wells _____
	Total Depth After Rework _____	
	Date Rework Commenced _____	Well Number _____
	Date Rework Completed _____	

WELL CASING RECORD — BEFORE REWORK

Casing		Cement		Perforations		Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	

WELL CASING RECORD — AFTER REWORK (Indicate Additions and Changes Only)

Casing		Cement		Perforations		Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	

DESCRIBE REWORK OPERATIONS IN DETAIL
USE ADDITIONAL SHEETS IF NECESSARY

WIRE LINE LOGS. LIST EACH TYPE

Log Types	Logged Intervals

CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).

NAME AND OFFICIAL TITLE (Please type or print)

SIGNATURE

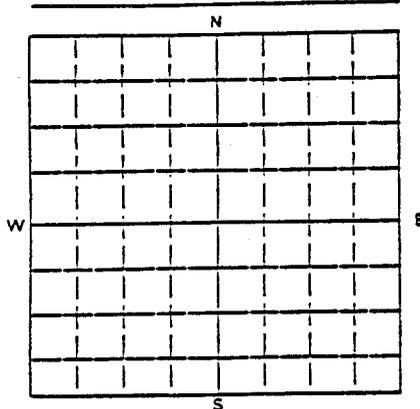
DATE SIGNED



PLUGGING RECORD

NAME AND ADDRESS OF PERMITTEE	NAME AND ADDRESS OF CEMENTING COMPANY
-------------------------------	---------------------------------------

LOCATE WELL AND OUTLINE UNIT ON SECTION PLAT — 640 ACRES



STATE	COUNTY	PERMIT NUMBER
-------	--------	---------------

SURFACE LOCATION DESCRIPTION

1/4 OF	1/4 OF	1/4 SECTION	TOWNSHIP	RANGE
--------	--------	-------------	----------	-------

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface Location _____ ft. from (N/S) _____ Line of quarter section
and _____ ft. from (E/W) _____ Line of quarter section

TYPE OF AUTHORIZATION

Individual Permit
 Area Permit
 Rule

Number of Wells _____

Lease Name _____

Describe in detail the manner in which the fluid was placed and the method used in introducing it into the hole

CASING AND TUBING RECORD AFTER PLUGGING					WELL ACTIVITY	METHOD OF EMPLACEMENT OF CEMENT PLUGS
SIZE	WT(LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE	<input type="checkbox"/> CLASS I <input type="checkbox"/> CLASS II <input type="checkbox"/> Brine Disposal <input type="checkbox"/> Enhanced Recovery <input type="checkbox"/> Hydrocarbon Storage <input type="checkbox"/> CLASS III	<input type="checkbox"/> The Balance Method <input type="checkbox"/> The Dump Bailer Method <input type="checkbox"/> The Two-Plug Method <input type="checkbox"/> Other

CEMENTING TO PLUG AND ABANDON DATA:	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)							
Depth to Bottom of Tubing or Drill Pipe (ft.)							
Sacks of Cement To Be Used (each plug)							
Slurry Volume To Be Pumped (cu. ft.)							
Calculated Top of Plug (ft.)							
Measured Top of Plug (if tagged ft.)							
Slurry Wt. (Lb./Gal.)							
Type Cement or Other Material (Class III)							

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS			
From	To	From	To

Signature of Cementer or Authorized Representative	Signature of EPA Representative
--	---------------------------------

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (REF. 40 CFR 122.22)

NAME AND OFFICIAL TITLE (Please type or print)	SIGNATURE	DATE SIGNED
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APPENDIX C (Plugging Plan)

Plugging and Abandonment Form
Plugging and Abandonment Plan
Plugging and Abandonment Diagram

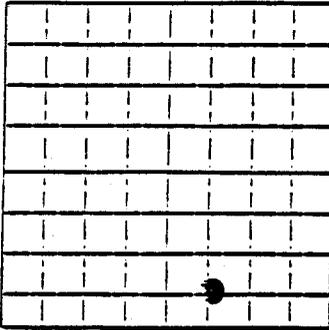


PLUGGING AND ABANDONMENT PLAN

NAME AND ADDRESS OF FACILITY
Wonsits Valley Federal Unit
P. O. Box 455
Vernal, UT 84078

NAME AND ADDRESS OF OWNER/OPERATOR
Chevron U.S.A. Inc.
P. O. Box 599
Denver, CO 80201

LOCATE WELL AND OUTLINE UNIT ON
SECTION PLAT - 640 ACRES



STATE | COUNTY | PERMIT NUMBER
UT | Uintah |
SURFACE LOCATION DESCRIPTION
NE 1/4 OF SW 1/4 OF SE 1/4 SECTION 14 TOWNSHIP 8S RANGE 21E
LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface Location 610' from (N/S) S Line of quarter section
1989 and 1/2' from (E/W) E Line of quarter section

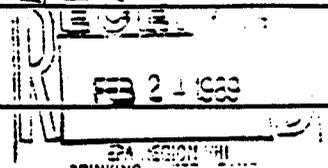
TYPE OF AUTHORIZATION | WELL ACTIVITY
 Individual Permit | CLASS I
 Area Permit | CLASS II
 Rule | Brine Disposal
Number of Wells 1 | Enhanced Recovery
 | Hydrocarbon Storage
 | CLASS III
Lease Name Wonsits Valley Federal Unit | Well Number #66

CASING AND TUBING RECORD AFTER PLUGGING				METHOD OF EMPLACEMENT OF CEMENT PLUG			
SIZE	WT(LB./FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE	<input checked="" type="checkbox"/> The Balance Method for Plug #3	<input type="checkbox"/> The Dump Barrier Method	<input type="checkbox"/> The Two-Plug Method
8-5/8"	24	-	291	12-1/4"	<input checked="" type="checkbox"/> Other squeeze thru CICR's for Plugs #1 and #2		
5-1/2"	14	-	5286	7-7/8"			

CEMENTING TO PLUG AND ABANDON DATA:							
Size of Hole or Pipe in which Plug Will Be Placed (Inches)	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Depth to Bottom of Tubing or Drill Pipe (ft.)	1500	2900	350				
Sacks of Cement To Be Used (each plug)	100	100	50				
Slurry Volume To Be Pumped (cu. ft.)	134	134	67				
Calculated Top of Plug (ft.)	1500'	2900'	Surface				
Measured Top of Plug (if tagged ft.)							
Slurry Wt. (LB./Gal.)	14.3	14.3	14.8				
Type Cement or Other Material (Class III)	G	G	G				

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (If any)			
From	To	From	To

Estimated Cost to Plug Wells
\$30,000



CERTIFICATION
I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

NAME AND OFFICIAL TITLE (Please type or print) | SIGNATURE | DATE SIGNED
 | *[Signature]* | 2/22/89

Plugging and Abandonment Plan

Wonsits Valley Federal Unit #66

PLUG NO. 1: Set cast iron cement retainer (CICR), above Green River perforations, at approximately 5000 feet KB. Cement squeeze Green River perforations (5102-5110 feet and 5204-5220 feet) perforations with 100 sacks of Neat "G" cement. Drop 2-sack cement cap on CICR.

Pressure test 5-1/2 inch casing to 500 psi. Isolate and repair leaks, if necessary.

Circulate hole with mud.

PLUG NO. 2: Perforate squeeze holes at approximately 2200 feet (KB). Set CICR at approximately 2100 feet (KB). Squeeze with 100 sacks of Class "G" cement. Drop 2-sack cement cap on CICR.

PLUG NO. 3: Run in 5-1/2 inch casing open ended. Spot a balanced plug from 350 feet (KB) to the surface.

PLUG NO. 4: Pump cement down 5-1/2 inch casing/8-5/8 inch casing annulus, and 5-1/2 inch casing/7-7/8 inch drill hole annulus to a depth of 660 feet (KB).

Cut off wellhead. Install marker. Reclaim location.

WONSITS VALLEY UNIT #66

KB = 4874'

GL = 4858'

LOCATION = SEC. 14, T8S, R21E
UINTAH COUNTY, UTAH

PROPOSED P&A

8-3/8", 24#, Grade J casing set @ 291' w/200 sxs. regular of cement.

PLUG NO. 4

Bottom plug @ 330'

PLUG NO. 3

Bottom of top job @ 660'

Top squeeze @ 1900'

PLUG NO. 2

CICR @ 2100'

Squeeze holes @ 2200'

~~UINTAH FMN
GREEN RIVER FMN
TO TOTAL DEPTH~~

Bottom squeeze @ 2300'

2665': Bottom of moderately Saline water: 3000 to 10,000 mg/l.

Top of cement @ 4310'

CICR @ 5000'

5102'-10' (F2)

PLUG NO. 1

5204'-20' (G1)

5-1/2", 14#, Grade J casing set @ 5289' w/225 sxs. of cement.

PSTD @ 5260'

TD @ 5287'

Completion Date: 4/66'

Well Type: Oil Producer

Drawn By: Bill Mansfield

Date Prepared: 5-17-89

RESPONSIVENESS SUMMARY
TO THE
STATE OF UTAH
FOR THE
CHEVRON U. S. A. INC.
WONSITS VALLEY FEDERAL UNIT #66
UINTAH COUNTY, UTAH
(EPA PERMIT NUMBER: UTS249420042)

During the public comment period for the above-referenced draft permit, Chevron U. S. A. Inc. and the State of Utah, Department of Natural Resources, Division of Oil, Gas and Mining submitted letters of comment to the Environmental Protection Agency (EPA). These letters were dated September 12, 1989 and September 14, 1989, respectively.

Part I. Authorization To Convert and Inject

1. STATE COMMENT: "On Page 4, it states that the permit and the authorization to inject are issued for the operating life of the well. In the Statement of Basis, the permit is issued for a period of ten (10) years. This seems to be a contradiction."

EPA RESPONSE: THE STATEMENT OF BASIS AND FINAL PERMIT NOW READ "FOR THE OPERATING LIFE OF THE WELL."

2. STATE COMMENT: "On Page 5, it states that the permit will expire upon delegation of primary enforcement responsibility to the State of Montana. This must be an error."

EPA RESPONSE: THE REFERENCE TO THE STATE OF MONTANA IS CORRECTED TO READ "...THE STATE OF UTAH OR THE UINTAH AND OURAY INDIAN RESERVATION UNLESS EITHER THAT STATE OR THE INDIAN RESERVATION HAS..."

3. STATE COMMENT: "Several places in the draft permit the well is referred to as a disposal well. This is in error as this well is an enhanced recovery injection well."

EPA RESPONSE: THE SINGLE DRAFT PERMIT REFERENCE TO THE WONSITS VALLEY FEDERAL UNIT #66 AS A DISPOSAL WELL (PAGE 6. Part II. SECTION A. 3. (a)) IS CORRECTED TO READ "...INJECTION WELL..."

Part II. Specific Permit Conditions

1. STATE COMMENT: "The permittee is being required to measure formation pore pressure prior to beginning injection. This is an unnecessary procedure at this late point in the life of this reservoir and such a pressure determination would serve no useful purpose."

EPA RESPONSE: PART II. SECTION A. 5.: FORMATION TESTING. ALSO REFER TO 40 CFR 146.22. (g) (1): (g) AT A MINIMUM THE FOLLOWING INFORMATION CONCERNING THE INJECTION FORMATION SHALL BE DETERMINED OR CALCULATED FOR NEW CLASS II WELLS OR PROJECTS: (1) FLUID PRESSURE. (2) ESTIMATED FRACTURE PRESSURE. (3) PHYSICAL AND CHEMICAL CHARACTERISTICS OF THE INJECTION ZONE.

2. STATE COMMENT: "The requirement for 13 days notice after re-work for inspection, and 30 days notice prior to performing the mechanical integrity test is excessive. The EPA should be able to arrange to witness these operations in less than 30 days."

EPA RESPONSE: PART II. SECTION C. 1. (a) (ii) and (h). PRIOR TO COMMENCING INJECTION. THE 13 DAY PERIOD IS A "DROP DEAD" CLAUSE FORCING THE EPA TO REVIEW THE CONVERSION PROCEDURES (APPROVED MIT AND EPA WELL REWORK RECORD) WITHIN 13 DAYS OF RECEIPT OF THIS DATA.

THE 30 DAY NOTIFICATION PERIOD, PRIOR TO RUNNING THE MECHANICAL INTEGRITY TEST (MIT) IS NOT CONSIDERED EXCESSIVE AND WILL REMAIN IN THE PERMIT. QUITE OFTEN THE EPA INSPECTORS WITNESS MIT'S WITHIN A WEEK OF NOTIFICATION.

3. STATE COMMENT: "The requirement to maintain a positive pressure on the annulus is unnecessary and may actually mask casing leaks in gas zones or artesian aquifers. Maintaining a zero annulus pressure is more effective in observing tubing and/or packer failures. Tubing and/or packer integrity are most important in preventing pollution."

EPA RESPONSE: PART II. SECTION C. 2. (a) OF DRAFT PERMIT. ALTHOUGH BOTH METHODS OF ANNULUS MONITORING MAY MASK LEAKS UNDER DIFFERING CIRCUMSTANCES, THE PERMIT AND STATEMENT OF BASIS HAVE BEEN CHANGED TO ALLOW A ZERO PRESSURE TO BE MAINTAINED ON THE ANNULUS.

THIS SHOULD BE CONSISTENT WITH STATE REQUIREMENTS.

4. STATE COMMENT: "Loss of mechanical integrity requires immediate shutin. This maybe (may be) unnecessary if a tubing or packer leak develops and no casing leak exists." Part II. Section C. 2. (c).

EPA RESPONSE: 40 CFR. 144.52 (a) (8). PERMITS FOR THIS TYPE OF WELL REQUIRE CONDITIONS WHICH PROHIBIT INJECTION IF ANY LOSS OF MECHANICAL INTEGRITY IS OBSERVED.

5. STATE COMMENT: "The permittee is required to sample and analyze injection fluid quarterly for the first year of operation. This is unnecessary in a waterflood project where years of data exists that would show trends in water quality change."

EPA RESPONSE: 40 CFR 146.23 (c). THE PERMIT AND STATEMENT OF BASIS HAVE BEEN CHANGED TO SHOW REPORTING OF INJECTED FLUID ANALYSES ON AN ANNUAL BASIS, OR WHENEVER THE FLUID SOURCE IS CHANGED.

6. STATE COMMENT: "The permit states that the permittee requested a maximum pressure of 4000 psig surface injection pressure. In reality a maximum pressure of 2000 psig was requested."

EPA RESPONSE: THE DRAFT PERMIT DOES NOT STATE THAT THE PERMITTEE REQUESTED A 4000 PSIG SURFACE INJECTION PRESSURE. THE ERROR OCCURS ON PAGE 6 OF THE STATEMENT OF BASIS. THIS ERROR IS CORRECTED IN THE STATEMENT OF BASIS AND WILL SHOW A REQUESTED 2000 PSIG SURFACE INJECTION PRESSURE.

7. STATE COMMENT: "Operators drilling wells on federal leases are required to file a bond or other type of financial surety with the BLM. It seems unnecessary that another surety instrument is required by a second federal agency, the EPA."

EPA RESPONSE: PART II. SECTION F OF PERMIT AND LAST PAGE OF THE STATEMENT OF BASIS. FINANCIAL INSTRUMENTS FILED BY THE OPERATOR WITH AGENCIES OTHER THAN THE EPA MAY BE DIRECTED TO OBLIGATORY ACTIVITIES OTHER THAN THE PLUGGING AND ABANDONMENT OF A CLASS II ENHANCED RECOVERY INJECTION WELL OR A SALT WATER DISPOSAL WELL. EPA'S CONCERN IS FOR THE PROTECTION OF UNDERGROUND SOURCES OF DRINKING WATER (USDW'S), AND THE PERMITTEE'S FINANCIAL INSTRUMENT IS SPECIFICALLY

DIRECTED TO THE PLUGGING AND ABANDONMENT OF A CLASS II WELL TO INSURE USDW PROTECTION.

CHEVRON HAS ELECTED TO SUBMIT AN ANNUAL FINANCIAL STATEMENT AS PROOF OF THEIR ABILITY TO PLUG AND ABANDON THE WVFU #66.

Part III. General Permit Conditions

1. STATE COMMENT: "Conversions. This section states that the permittee must get permission from the EPA to convert this well back to a producing well and may require specific monitoring and reporting after the conversion. This action seems to be going beyond EPA's jurisdiction and into regulating and development of the oil and gas resource."

EPA RESPONSE: PART III. SECTION B. 2. THIS CONDITION IS MADE TO INSURE THAT THE PERMITTEE WILL NOT CIRCUMVENT UNDERGROUND INJECTION CONTROL (UIC) PLUGGING REGULATIONS BY CONVERTING THE WELL, UNDER FALSE PREMISES, TO A NON-CLASS II WELL. SIX (6) MONTHS PRODUCTION RECORDS FROM THE CONVERTED WELL PROVE THE OPERATORS INTENT TO CONVERT THE INJECTION WELL TO A HYDROCARBON PRODUCING WELL. AT THAT POINT THE WELL WILL BE REMOVED FROM THE EPA INVENTORY OF UIC WELLS.

2. STATE COMMENT: "Need to Halt or Reduce Activity not a Defense. This section is not necessary. The Safe Drinking Water Act is clear in that the UIC Program is not to impede production activities unless essential to prevent contamination of USDW's."

EPA RESPONSE: THE ABOVE CONDITION IS STATED VERBATIM FROM 40 CFR 144.51 (c). PERMIT CONDITION PART III. SECTION E. 3.

3. STATE COMMENT: "A plugging and abandonment plan is incorporated in this permit. If during plugging operations, circumstances develop such that the approved plan cannot be followed, who will be responsible for expenses such as rig standby time while an alternate plan is approved by the EPA?"

EPA RESPONSE: THE OPERATOR IS RESPONSIBLE TO EVALUATE ALL POTENTIAL PLUGGING AND ABANDONMENT CONTINGENCIES IN ADVANCE. ANY STANDBY TIME COSTS WILL BE BORNE BY THE PERMITTEE, BUT THE EPA HAS IN THE PAST HAS HANDLED SIMILAR EMERGENCIES VIA THE TELEPHONE.

General Comments

STATE COMMENT: "The permit limits injection into the well to a time period of operation and rate of injection which would theoretically not allow injected fluid to travel beyond 1/4 mile from the well. This approach may be appropriate for a disposal operation but is not appropriate for an enhanced recovery (waterflood) operation. Under this limitation, the water front would not be allowed to reach the nearest producing well, thus leaving behind producible oil. This would result in an unnecessary loss of revenue and is contrary to state and federal laws of conservation."

EPA RESPONSE: PLEASE BE ADVISED THAT IT IS NOT OUR INTENT TO SECOND GUESS WHAT ANY PERMITTEE HAS IN MIND WHEN THEIR APPLICATION SPECIFICALLY REQUESTS A FIXED PERIOD OF TIME. IN THIS CASE CHEVRON REQUESTED, IN THEIR PERMIT APPLICATION, A 10 YEAR LIFE FOR THE WONSITS VALLEY FEDERAL UNIT # 66 ENHANCED RECOVERY INJECTION WATERFLOOD WELL.

STATE COMMENT: "As this well is located within a federal secondary recovery unit with considerable state mineral interest as well as federal mineral interests in which the state shares, the state of Utah is concerned about the proper and diligent development of the resources under a sound regulatory program and permit process. The notable lengthy permitting and noticing process for this well has most likely reduced resource recovery and made the operation of the waterflood project very difficult."

EPA RESPONSE: THE EPA DOES EVERYTHING POSSIBLE TO COMPLETE THE DRAFT PERMIT-PUBLIC NOTICE-FINAL PERMIT PROCESS IN A TIME PERIOD NO GREATER THAN NINETY (90) DAYS. EPA RESPONSE TIME IS SUBJECT TO EXISTING WORKLOAD CONSIDERATIONS AND OPERATOR RESPONSE TIME IN ADDRESSING PERMIT APPLICATION DEFICIENCIES.

STATE COMMENT: "We are also concerned that justification does not exist or has not been provided to require the permittee to run an Oxygen Activation Log on this well. This is a relatively new and unproven method that is very expensive."

EPA RESPONSE: THE UIC PROGRAM SEEKS TO PREVENT MOVEMENT OF FLUIDS INTO OR BETWEEN USDW'S. IN THE CASE OF THE CHEVRON WELL, NO CEMENT EXISTS BEHIND THE LONGSTRING CASING THROUGH THE USDW INTERVAL 2665 FEET TO SURFACE. THE OPERATOR IN THIS CASE HAS TWO OPTIONS: 1) PLACE CEMENT IN THIS INTERVAL OR, 2) PROVE THAT NO FLUID IS MOVING BEHIND THE PIPE IN THE USDW INTERVAL. IF NO

FLUID MOVEMENT IS DETECTED BY THE OXYGEN ACTIVATION LOG IN THE WONSITS VALLEY FEDERAL UNIT #66 IT MAY BE ASSUMED BY THE EPA THAT SOME OTHER POTENTIAL WONSITS VALLEY FEDERAL UNIT ENHANCED RECOVERY WELLS WILL NOT BE REQUIRED TO RUN THIS LOG. FEDERAL REGISTER DATED MONDAY, SEPTEMBER 26, 1988 GRANTS INTERIM APPROVAL FOR USE OF THE OXYGEN ACTIVATION LOG TO TEST FLUID MIGRATION BEHIND PIPE. THE ONLY ALTERNATIVE IS TO PERFORATE THE LONGSTRING AND SQUEEZE CEMENT.

RESPONSIVENESS SUMMARY
TO
CHEVRON U. S. A. INC.
FOR THE
WONSITS VALLEY FEDERAL UNIT #66
UINTAH COUNTY, UTAH
(EPA PERMIT NUMBER: UTS249420042)

During the public comment period for the above-referenced draft permit, Chevron U.S.A. Inc. and the State of Utah, Department of Natural Resources, Division of Oil, Gas and Mining, submitted letters of comment to the Environmental Protection Agency (EPA). These letters were dated September 12, 1989 and September 14, 1989, respectively.

GENERAL:

CHEVRON COMMENT: "An application for a permit to convert Wonsits Valley #66 from a producing well to an injection well was submitted to your office in mid-to-late February, 1989. A draft permit was issued by your office for public comment on August 15, 1989. According to your public notice, a final permit decision will be issued at the close of the public comment period (September 15, 1989) and the final decision does not become effective until 30 days thereafter (October 15, 1989). A permit which could be approved by the Utah Division of Oil, Gas and Mining within one month has taken EPA at least eight months, resulting in (1) no incremental increase in the protection of Underground Sources of Drinking Water (USDW); and (2) lost revenue as a result of lost production to the citizens of the United States of America and the State of Utah, the members of the Uintah-Ouray Tribe and Chevron. It is obvious that the bulk of the permit is boilerplate: references to the State of Montana on page 2 of the Public Notice, page 5 of 33 of the Draft Permit, and page 1 of the Statement of Basis provide evidence that, notwithstanding minor well-specific calculations and locational information, permit requirements are standard and should not require eight months for regurgitation. (In addition to the publishing errors cited above, please note that the last "sentences" on pages 10 of 33 and 14 of 33 are incomplete.)

Operators regulated under the UIC program are required to adhere to strict notification, testing and reporting schedules: for example, records of workover and other test data must be supplied to EPA within 60 days of the activity; demonstration of mechanical integrity must occur within 30 days of completion of

ADDENDUM
TO
STATEMENT OF BASIS

Chevron U. S. A. Inc.
Wonsits Valley Federal Unit #66
Uintah County, Utah
EPA Permit #UTS249420042
(date prepared 10/26/89)

DESCRIPTION OF FACILITY AND BACKGROUND INFORMATION:

Page 1, Paragraph 2 now reads, "The area covered by the application is in a portion of the Wonsits Valley Federal Unit (WVFU), with the Wonsits Valley Federal Unit #66 located in the SW 1/4 of the SE 1/4 of Section 14-T8S-R21E, Uintah, County, Utah. The WVFU #66 is also located in the Uintah-Ouray Indian Reservation. The injection zone is not an underground source of drinking water (USDW)."

Page 2, Paragraph 3 now reads, "The permit will be issued for the operating life of the well from the effective date of this permit. During the life of this well no reapplication will be necessary unless the permit is terminated for reasonable cause (40 CFR 144.39, 144.40, and 144.41). However, the permit will be reviewed every five (5) years." The operator, in the application for a permit, had estimated the life of this injection well at ten (10) years.

Page 2, Paragraph 4 now reads, "This Statement of Basis gives the derivation of the site-specific permit conditions and reasons for them on the basis of the direct implementation regulations promulgated for the Uintah and Ouray Indian Tribal lands in the State of Utah under the Underground Injection Control (UIC) program provisions for the Safe Water Drinking Act (SWDA). The general permit conditions for which the content is mandatory and not subject to site-specific differences (based on 40 CFR Parts 144, 146 and 147), are not included in the discussion."

PART II, Section A - WELL CONVERSION REQUIREMENTS

Page 3, Paragraph 1 now reads, "The State of Utah, Department of Natural Resources, Technical Publication No. 92, "Base of Moderately Saline Ground Water In the Uinta Basin, Utah", describes "moderately saline" as water analyzed to contain 3,000 to 10,000 mg/l Total Dissolved Solids (TDS). The WVFU #66 injection well is located in an area where "moderately saline"

waters extend into the subsurface to a depth of approximately 2665 feet."

Page 3, Paragraph 2 now reads, "All underground sources of drinking water (USDW) down through the depth of 2665 feet are protected from the Lower Green River injection zone (5102-5220 feet, gross) by annular cement between the 5-1/2 inch casing/ 7-7/8 inch drill hole. By cement bond log, the top of this annular cement is found at approximately 4310 feet KB. Plugging and abandonment procedures ensure USDW protection from contamination from the injection zone."

Formation Testing

(Condition 4)

The permittee is required to determine the disposal zone fluid pore pressure, 40 CFR 146.22 (g) (1). Chevron will be required to demonstrate the absence of interzonal flow behind the casing, for the interval 291 feet to 2665 feet, using an "oxygen activation" (Hydrolog) tool. No additional logging will be required.

PART II, Section C - WELL OPERATION

Prior to Commencing Injection

(Condition 1)

Injection will not be allowed to commence until the permittee has submitted a Well Rework Record (EPA Form 7520-12), and a mechanical integrity test has been performed, witnessed, and approved, according to the guidelines discussed in the permit.

Mechanical Integrity

(Condition 2)

5-1/2 inch casing/2-7/8 inch tubing annulus pressure monitoring will be performed continuously to demonstrate casing/packer/tubing integrity. Observations of annulus pressure and injection pressure will be performed daily.

5-1/2 inch casing/8-5/8 inch surface casing annulus pressure monitoring will be performed continuously to demonstrate casing integrity. Observations of casing integrity will be performed daily.

The annuli pressures and range of normal fluctuations due to variations in the injection pressure and injection fluid temperatures shall be defined or determined by the pressure monitoring program.

A tubing/casing annulus pressure test will be performed prior to commencing injection, and must be repeated at least every five (5) years to demonstrate tubing, packer, and casing

integrity.

Injection Pressure Limitation

(Condition 4)

The permittee has requested a maximum surface injection pressure of 2000 psig. A SURFACE INJECTION PRESSURE GREATER THAN 1500 PSIG WILL BE PERMITTED ONLY AFTER DEMONSTRATION THAT SUCH INCREASED INJECTION PRESSURE WILL NOT EXCEED THE GREEN RIVER FORMATION INJECTION ZONE FRACTURE PRESSURE.

Injection Volume Limitation

(Condition 5)

There is no limitation on the number of barrels of water per day (BWPD) of fluid from the Green River Formation, and additional water from the stratigraphically younger, and shallower, Uintah Formation that shall be injected into this well, provided that in no case shall injection pressure exceed 1500 psig. Chevron reports that the maximum daily injection rate should not exceed 4000 BWPD.

PART II, Section D - MONITORING, RECORDKEEPING AND REPORTING
OF RESULTS

Injection Well Monitoring Program

(Condition 1)

FIRST PARAGRAPH: The permittee is required to monitor water quality of the injected fluids annually for the life of the well. A water sample of the injected fluids shall be analyzed for total dissolved solids, pH, specific conductivity, and specific gravity. Any time there is a change in the source of injection fluid, a new water quality analysis, is also required.

refining its responsibilities to the regulation of injection/disposal activities. As you may know, producing wells are adequately regulated by the BLM on federal lands and/or by various state oil and gas regulatory agencies on other lands. Modification of this paragraph to reflect your specific intent would be appreciated."

EPA RESPONSE: THIS REQUIREMENT IS MADE TO INSURE THAT OPERATORS DO NOT CIRCUMVENT UIC PLUGGING REGULATIONS BY CONVERTING INJECTION/DISPOSAL WELLS TO "PRODUCING" WELLS. THE SUBMISSION TO EPA OF SIX (6) MONTHLY PRODUCTION RECORDS, USUALLY SENT TO A STATE REGULATORY BODY, WILL PROVE THE CONVERSION LEGITIMATE. AT THE END OF THIS SIX (6) MONTH PERIOD THE EPA WILL REMOVE THAT WELL FROM THE UIC INVENTORY.

STATEMENT OF BASIS

CHEVRON COMMENT: "Page 5, Injection Volume Limitation. Calculation of the maximum injection rate has been forced to match volumetric fillup of an area contained within a 1/4 mile radius of the proposed injection well over the ten-year life of the well. The well should not be rate-limited, but should be injection pressure-limited to the calculated maximum injection pressure of 1500 psi. We, therefore, propose that the maximum injection rate be the volume of water the formation will accept while maintaining a surface injection pressure of 1500 psi or 4,000 BWIPD, whichever is less. This increase in the injection rate would accelerate waterflood response (the recovery of additional oil from the offset producing wells) without initiating new fractures in the formation."

EPA RESPONSE: THE PERMIT AND STATEMENT OF BASIS ARE MODIFIED TO DELETE THE INJECTION RATE/VOLUME LIMITATION. THE PERMIT WILL LIMIT INJECTION TO A MAXIMUM 1500 POUNDS PER SQUARE INCH GAUGE (PSIG).

workovers; EPA must be notified 30 days prior to demonstrations of mechanical integrity; and so forth. In order to reduce the occurrence of lost production and to enable operators to better plan and manage their production, EPA must establish and adhere to a reasonable time-frame (30 to 45 days) for issuance of permits."

EPA RESPONSE: ALL REFERENCES TO THE STATE OF MONTANA HAVE BEEN CORRECTED TO "...THE STATE OF UTAH OR THE UINTAH AND OURAY INDIAN RESERVATION UNLESS EITHER THAT STATE OR THE INDIAN RESERVATION HAS..."

THE LAST SENTENCES ON PAGES 10 AND 14 OF THE DRAFT PERMIT WERE OMITTED IN HEAD-TO-TOE XEROXING. THE COMPLETE SENTENCES APPEAR IN THE FINAL PERMIT.

THE PERMIT APPLICATION WAS RECEIVED BY THE PERMIT WRITER ON MARCH 10, 1989. DELAYS IN PERMIT APPLICATION PROCESSING ARE ALSO OCCASIONED BY REQUESTS OF A PERMIT WRITER FOR ADDITIONAL INFORMATION. THE EPA ATTEMPTS TO HAVE DRAFT PERMIT-PUBLIC NOTICE-FINAL PERMIT TURN-AROUND COMPLETED IN 90 DAYS. THE 90-DAY PROCESSING TIME IS SUBJECT TO EXISTING WORKLOAD CONSIDERATIONS AND OPERATOR RESPONSE TIME TO REQUESTS FOR INFORMATION.

PART II: SPECIFIC PERMIT CONDITIONS

1. CHEVRON COMMENT: "Page 7 of 33, A.5. Oxygen Activation Logging. We propose, therefore, that oxygen activation logging be required from the top of the tight carbonates of the Green River formation at 2,665 ft. to 291 ft. Logging between 2,665 ft. and 4,310 ft. to demonstrate the absence of interzonal flow behind the casing is unnecessary since, as set forth above, USDW's requiring protection are absent. At a later date, when future permit actions are requested, we may propose that your requirement for the carbon-activation log be eliminated completely if this or subsequent logging proves the absence of USDW's above 2,665 ft."

EPA RESPONSE: WE CONCUR WITH YOUR DETERMINATION OF USDW LOCATIONS AND WE HAVE CHANGED THE FINAL PERMIT TO REQUIRE OXYGEN ACTIVATION LOGGING (OAL) IN THE INTERVAL FROM 2665 FEET TO 291 FEET. IF, IN THE FUTURE, THE USDW'S ARE PROVEN TO EXIST AT A MUCH SHALLOWER DEPTH, THE OAL WILL BE REQUIRED ONLY IN THAT PORTION OF THE USDW INTERVAL THAT IS NOT PROTECTED BY CEMENTED CASING. HOWEVER, IF NO FLUID MOVEMENT IS DETECTED BY THE OAL IN THE WONSITS VALLEY FEDERAL UNIT #66 IT MAY BE ASSUMED BY THE EPA THAT SOME OTHER POTENTIAL WONSITS VALLEY FEDERAL UNIT ENHANCED RECOVERY WELLS MAY NOT BE REQUIRED TO RUN THIS LOG.

2. CHEVRON COMMENT: "Page 7 of 33, A.5. Formation Testing It is our belief that additional sampling of the Lower Green River interval prior to acidization of the formation is duplicative and, therefore, unnecessary. The zone is proven to contain hydrocarbons with associated water and is, therefore, not an USDW. Furthermore, an analysis of Lower Green River produced water was submitted with the permit application."

EPA RESPONSE: THE REQUIREMENT TO SAMPLE THE LOWER GREEN RIVER FORMATION FLUID HAS BEEN DELETED FROM THE PERMIT.

CHEVRON IS REQUIRED TO OBTAIN, OR TO CALCULATE, A FORMATION PORE PRESSURE FROM THE INJECTION INTERVAL.

3. CHEVRON COMMENT: "Page 11 of 33, D.I.(a)(i). Injection Well monitoring Program. We feel that quarterly analysis of injected fluids for Total Dissolved Solids, pH, Specific Conductivity and Specific Gravity is unnecessary. We, therefore, propose submission of quarterly analyses for the parameters indicated for one year only, unless the conditions of paragraph D.1.(a)(ii) are met."

EPA RESPONSE: QUARTERLY INJECTION FLUID ANALYSIS HAS BEEN MODIFIED TO ALLOW FOR ANNUAL INJECTION FLUID ANALYSIS UNLESS THE FLUID SOURCE OR COMPOSITION HAS CHANGED.

4. CHEVRON COMMENT: "Page 11 of 33, D.1.(c). Injection Well Monitoring Program. We feel that daily observation and monthly recording of the 5-1/2 inch long string/8-5/8 inch surface casing annulus is unnecessary, since the annulus is filled with cement to the surface, precluding the possibility of either leakage or pressure buildup."

EPA RESPONSE: THE EPA WILL CERTAINLY WAVE THIS REQUIREMENT WHEN CHEVRON HAS SATISFACTORILY SHOWN EPA THAT THERE IS CEMENT BETWEEN THE LONGSTRING AND SURFACE CASING. NOWHERE IN THE APPLICATION HAS CHEVRON SHOWN, OR DESCRIBED, CEMENT BETWEEN THE LONGSTRING AND THE SURFACE CASING. PLEASE REFER TO YOUR SCHEMATIC DIAGRAMS SUBMITTED WITH THE PERMIT APPLICATION. NO CEMENT IS DESCRIBED IN THE 5-1/2 INCH X 8-5/8 INCH ANNULUS ABOVE 4310 FEET.

PART III: GENERAL PERMIT CONDITIONS

CHEVRON COMMENT: "Page 16 of 33. B.5 (SHOULD READ B.2) Conversions. It is our belief that long term regulation, such as "well specific monitoring and reporting", of non-Class II wells (i.e., producing wells) which have been converted from Class II wells is beyond the jurisdiction of EPA and would result in unnecessary duplication of effort by operators. In addition, it appears that the EPA should direct its efforts to focusing on and

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved
Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.
U-0807

6. INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back a well. Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED
FEB 12 1990
DIVISION OF
OIL, GAS & MINING

1. OIL WELL GAS WELL OTHER **Water Injector**

2. NAME OF OPERATOR
Chevron U.S.A. Inc., Room 13097

3. ADDRESS OF OPERATOR
P.O. Box 599, Denver, CO 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface
610' FSL & 1,989' FEL SW $\frac{1}{4}$ SE $\frac{1}{4}$

7. UNIT AGREEMENT NAME
Wonsits Valley

8. FARM OR LEASE NAME
Wonsits Valley Federal Unit

9. WELL NO.
#66

10. FIELD AND POOL, OR WILDCAT
Wonsits Valley-

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 14, T8S, R21E

12. COUNTY OR PARISH
Uintah

13. STATE
Utah

14. PERMIT NO.
43-047-20042

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
KB: 4,874'

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"/>	PULL 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) Convert to water injector <input checked="" type="checkbox"/>	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting and 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.)

- MIRU Gudac WSU 1/26/90. P-test 5 $\frac{1}{2}$ " csg. to 1,000 psi. ND WH. NU & test BOPE.
- POOH w/production tbg. & pkr.
- Clean out w/bit & scraper to PBSD @ 5,260'.
- Perf'd. Green River G-1 5,204'-5,220' & F-2 5,102'-5,110' w/4" csg. guns, 4 spf, 90° phasing.
- Acid wash tbg. w/300 gals. 15% HCL. Acidized G-1 perfs w/1,200 gals. FE acid. Swab back load. Acidize F-2 perfs w/800 gals. FE acid. Swab back load.
- Ran oxygen activation log f/2,665'-130'.
- Hydrotest in hole w/IPC injection string.
- ND BOPE. NU & test tree to 3,000 psi.
- Pumped 90 BBLS. pkr. fld. & freeze blanket dwn. csg.
- RD Gudac WSU 2/2/90.
- Performed MIT test. P-tested csg. to 1,100 psi f/55 min. TWOTP 2/3/90.

- 3-BLM
- 3-State
- 1-EEM
- 1-MKD
- 2-Dr1g.
- 1-PLM
- 1-Sec. 724C
- 1-Sec. 724R
- 1-COS
- 1-JLW

OIL AND GAS	
DPN	RJF
JRB	1. GLH
DTS	SLS
2-TAS	DATE
3-	MICROFILM
4-	FILE

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

SIGNED J. B. Watson TITLE Technical Assistant DATE 2/8/90

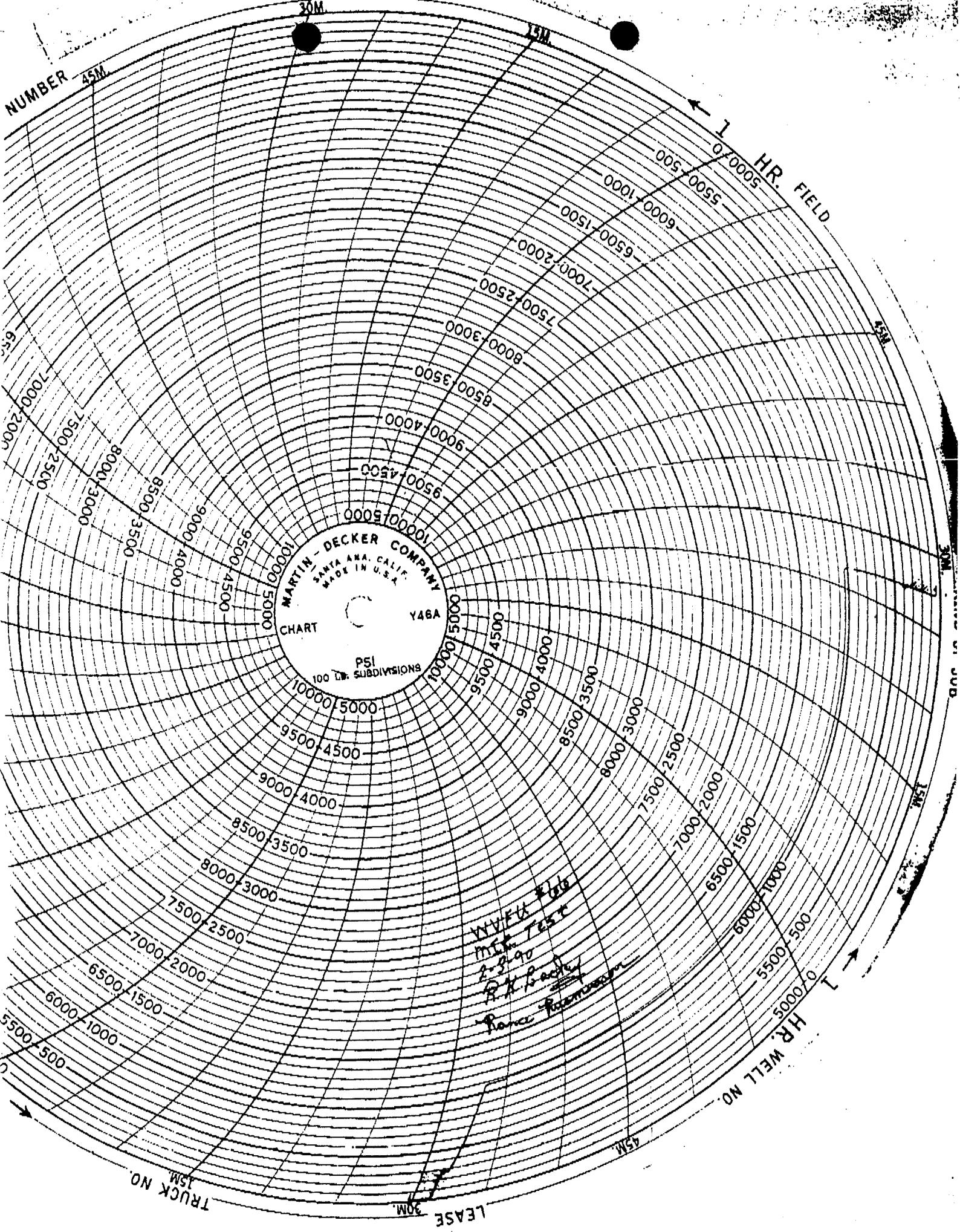
(This space for Federal or State office use)

APPROVED BY _____ TITLE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

SENT BY: AERIAL TELETYPE COMPANY



WVF 11 1/2
 MTK Test
 2-2-90
 R.H. Backe
 Dave Thompson

LEASE

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

1. Type of Well
Oil Gas
 Well Well Other WATER INJECTION

2. Name of Operator
CHEVRON U.S.A. PRODUCTION COMPANY

3. Address and Telephone No. **Steve McPherson in Red Wash (801) 781-4310**
11002 E. 17500 S. VERNAL, UT 84078-8526 or **Gary Scott in Rangely, CO. (970) 675-3791**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
610' FSL & 1989' FEL (SW SE) SECTION 14, T8S, R21E, SLBM.

5. Lease Designation and Serial No.
U-0807

6. If Indian, Allottee or Tribe Name
N/A

7. If Unit or CA, Agreement Designation
Wonsits Valley Federal Unit

8. Well Name and No.
Wonsits Valley Federal Unit 66

9. API Well No.
43-047-20042

10. Field and Pool, or Exploratory Area
Wonsits Valley - Green River

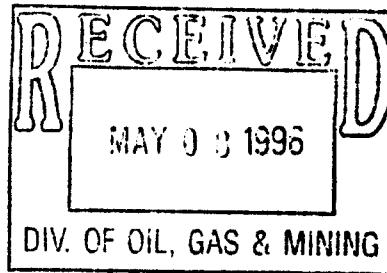
11. County or Parish, State
UINTAH, UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <u>SHUT-IN</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> 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)
AS OF 3/6/96, SUBJECT INJECTION WELL WAS SHUT-IN.



14. I hereby certify that the foregoing is true and correct.
Signed **G.D. SCOTT** *A.D. Scott* Title **DRILLING TECHNICIAN** Date **May 3, 1996**

(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.

<u>Lease Name</u>	<u>Field</u>	<u>Section</u>	<u>Township</u>	<u>Range</u>	<u>County</u>	<u>State</u>
Wonsits Valley Unit #54	Wonsits WV	7	8S	22E	Uintah	UT
Wonsits Valley Unit #55	Wonsits WV	14	8S	21E	Uintah	UT
Wonsits Valley Unit #56	Wonsits WV	1	8S	21E	Uintah	UT
Wonsits Valley Unit #57	Wonsits WV	2	8S	21E	Uintah	UT
Wonsits Valley Unit #58	Wonsits WV	13	8S	21E	Uintah	UT
Wonsits Valley Unit #59	Wonsits WV	14	8S	21E	Uintah	UT
Wonsits Valley Unit #6	Wonsits WV	7	8S	22E	Uintah	UT
Wonsits Valley Unit #60	Wonsits WV	15	8S	21E	Uintah	UT
Wonsits Valley Unit #61	Wonsits WV	18	8S	21E	Uintah	UT
Wonsits Valley Unit #62	Wonsits WV	10	8S	21E	Uintah	UT
Wonsits Valley Unit #63	Wonsits WV	10	8S	21E	Uintah	UT
Wonsits Valley Unit #65	Wonsits WV	15	8S	21E	Uintah	UT
Wonsits Valley Unit #66	Wonsits WV	14	8S	21E	Uintah	UT
Wonsits Valley Unit #67	Wonsits WV	15	8S	21E	Uintah	UT
Wonsits Valley Unit #68	Wonsits WV	15	8S	21E	Uintah	UT
Wonsits Valley Unit #69	Wonsits WV	18	8S	22E	Uintah	UT
Wonsits Valley Unit #70	Wonsits WV	13	8S	21E	Uintah	UT
Wonsits Valley Unit #71	Wonsits WV	15	8S	21E	Uintah	UT
Wonsits Valley Unit #72	Wonsits WV	16	8S	21E	Uintah	UT
Wonsits Valley Unit #73	Wonsits WV	16	8S	21E	Uintah	UT
Wonsits Valley Unit #74	Wonsits WV	16	8S	21E	Uintah	UT
Wonsits Valley Unit #75	Wonsits WV	16	8S	21E	Uintah	UT
Wonsits Valley Unit #78	Wonsits WV	16	8S	21E	Uintah	UT
Wonsits Valley Unit #8	Wonsits WV	12	8S	21E	Uintah	UT
Wonsits Valley Unit #80	Wonsits WV	23	8S	21E	Uintah	UT
Wonsits Valley Unit #81	Wonsits WV	24	8S	21E	Uintah	UT
Wonsits Valley Unit #82	Wonsits WV	24	8S	21E	Uintah	UT
Wonsits Valley Unit #83	Wonsits WV	23	8S	21E	Uintah	UT
Wonsits Valley Unit #84-2	Wonsits WV	23	8S	21E	Uintah	UT
Wonsits Valley Unit #85	Wonsits WV	12	8S	21E	Uintah	UT
Wonsits Valley Unit #86	Wonsits WV	12	8S	21E	Uintah	UT
Wonsits Valley Unit #87	Wonsits WV	12	8S	21E	Uintah	UT
Wonsits Valley Unit #88-2	Wonsits WV	12	8S	21E	Uintah	UT
Wonsits Valley Unit #89	Wonsits WV	7	8S	22E	Uintah	UT
Wonsits Valley Unit #9	Wonsits WV	12	8S	21E	Uintah	UT
Wonsits Valley Unit #92	Wonsits WV	12	8S	21E	Uintah	UT
Wonsits Valley Unit #93	Wonsits WV	11	8S	21E	Uintah	UT
Wonsits Valley Unit #94	Wonsits WV	11	8S	21E	Uintah	UT

06/27/85
leases gulf operated/file2

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

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Wonsits Valley - Green River

11. County or Parish, State
UINTAH, UTAH

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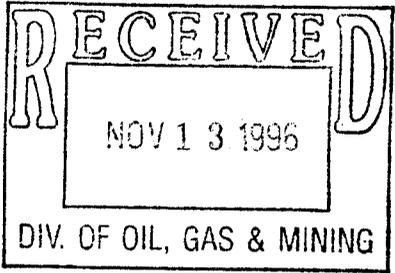
TYPE OF SUBMISSION	TYPE OF ACTION
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<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <u>TA EXTENSION</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> 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)

CHEVRON IS REQUESTING AN EXTENSION ON THE ABOVE TEMPORARILY ABANDONED WELL STATUS AS WE ARE EVALUATING WELL FOR DEEPENING.

**Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY**



14. I hereby certify that the foregoing is true and correct.
Signed G.D. SCOTT *G.D. Scott* Title DRILLING TECHNICIAN Date November 4, 1996

(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.

**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

5. Lease Designation and Serial No.
U-0807

6. If Indian, Allottee or Tribe Name
N/A

7. If Unit or CA, Agreement Designation
Wonsits Valley Federal Unit

8. Well Name and No.
Wonsits Valley Federal Unit 66

9. API Well No.
43-047-20042

10. Field and Pool, or Exploratory Area
Wonsits Valley - Green River

11. County or Parish, State
UINTAH, UTAH

SUBMIT IN TRIPLICATE

1. Type of Well
Oil Gas
 Well Well Other **WATER INJECTOR**

2. Name of Operator
CHEVRON U.S.A. PRODUCTION COMPANY

3. Address and Telephone No.
11002 E. 17500 S. VERNAL, UT 84078-8526 **(801) 781-4300**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
610' FSL & 1989' FEL (SW SE) SECTION 14, T8S, R21E, SLBM

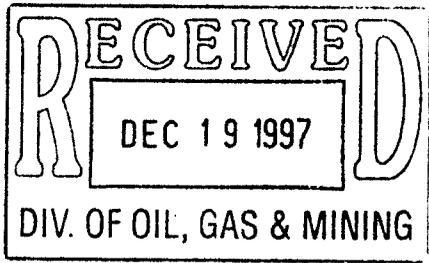
12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other TA STATUS OF WELL
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> 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)

CHEVRON IS REQUESTING A TA STATUS ON THE ABOVE WELL. THIS WELL WILL BE P&A'D DURING 1998.



14. I hereby certify that the foregoing is true and correct.
Signed *D. C. Tanner* Title Computer Systems Operator Date 12/10/97

(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.

Mechanical Integrity Test Casing or Annulus Pressure Test

U.S. Environmental Protection Agency
Underground Injection Control Program, UIC Implementation Section, 8WM-DW
999 18th Street, Suite 500, Denver, CO 80202-2466

EPA Witness: R. WILKINS Date 5/24/97 Time 11:00 (am)/pm

Test conducted by: R. WILKINS

Others present: _____

Well: <u>WVFL #66</u> Field: <u>Wonsita Valley</u> Well Location: <u>SW/SE-14-85-21E</u>	Well ID: <u>API# 43-047-20042</u> <u>EPA ID# UTO3098</u> Company: <u>Cherxon USA.</u> Address: <u>11002 East 17500 South</u> <u>Jurnal UT. 84078-8526</u>
--	---

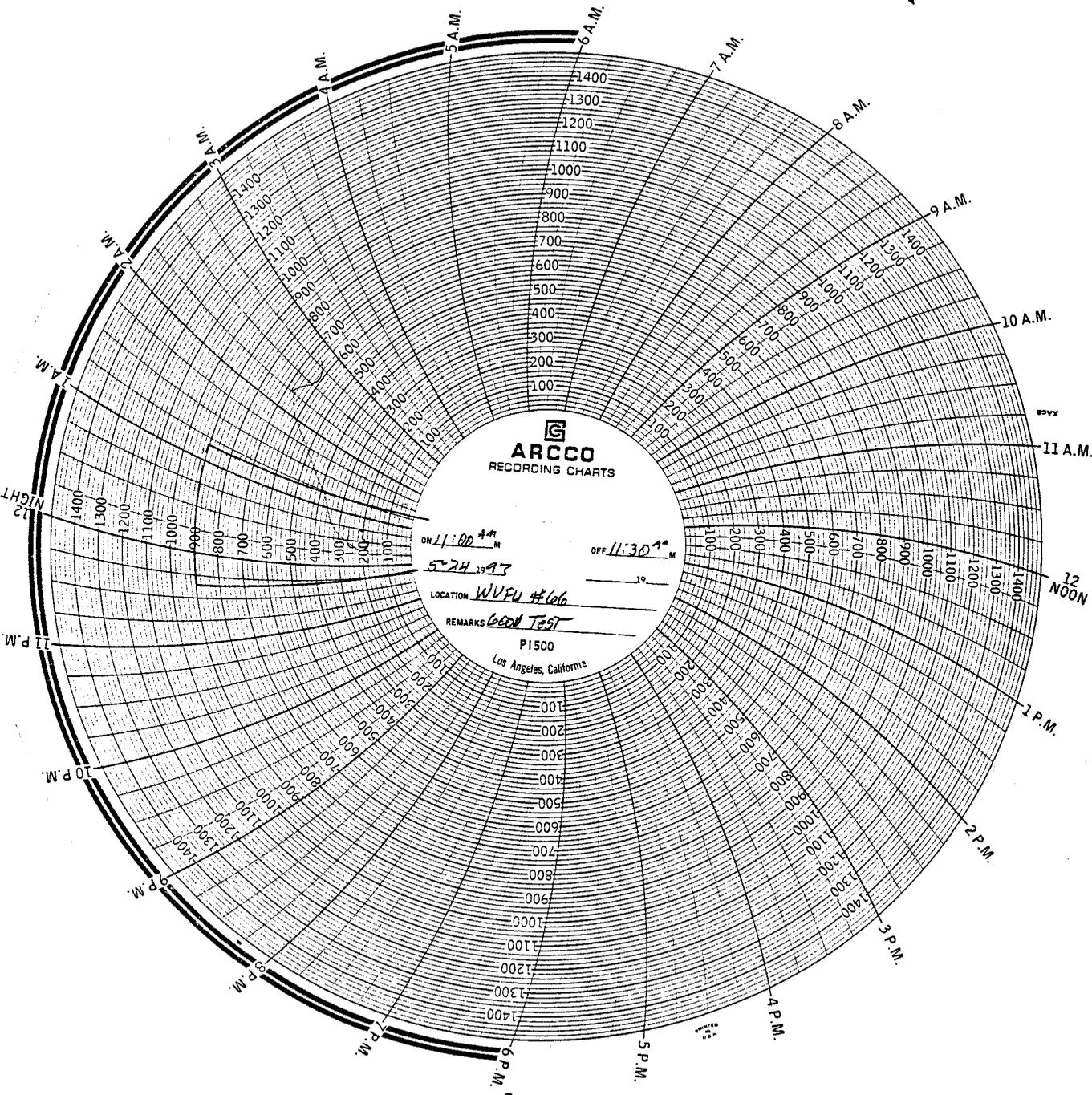
Well Status: TA

Time	Test #1	Test #2	Test #3
0 min	<u>900</u> _____ psig	_____ psig	_____ psig
5	_____	_____	_____
10	_____	_____	_____
15	<u>900</u> _____	_____	_____
20	_____	_____	_____
25	_____	_____	_____
30 min	<u>900</u> _____	_____	_____
35	_____	_____	_____
40	_____	_____	_____
45	_____	_____	_____
50	_____	_____	_____
55	_____	_____	_____
60 min	_____	_____	_____
Tubing press	<u>500</u> _____ psig	_____ psig	_____ psig

Result (circle) Pass Fail Pass Fail Pass Fail

Signature of EPA Witness: RANDY WILKINS

See back of page for any additional comments & compliance followup.



ARCCO
RECORDING CHARTS

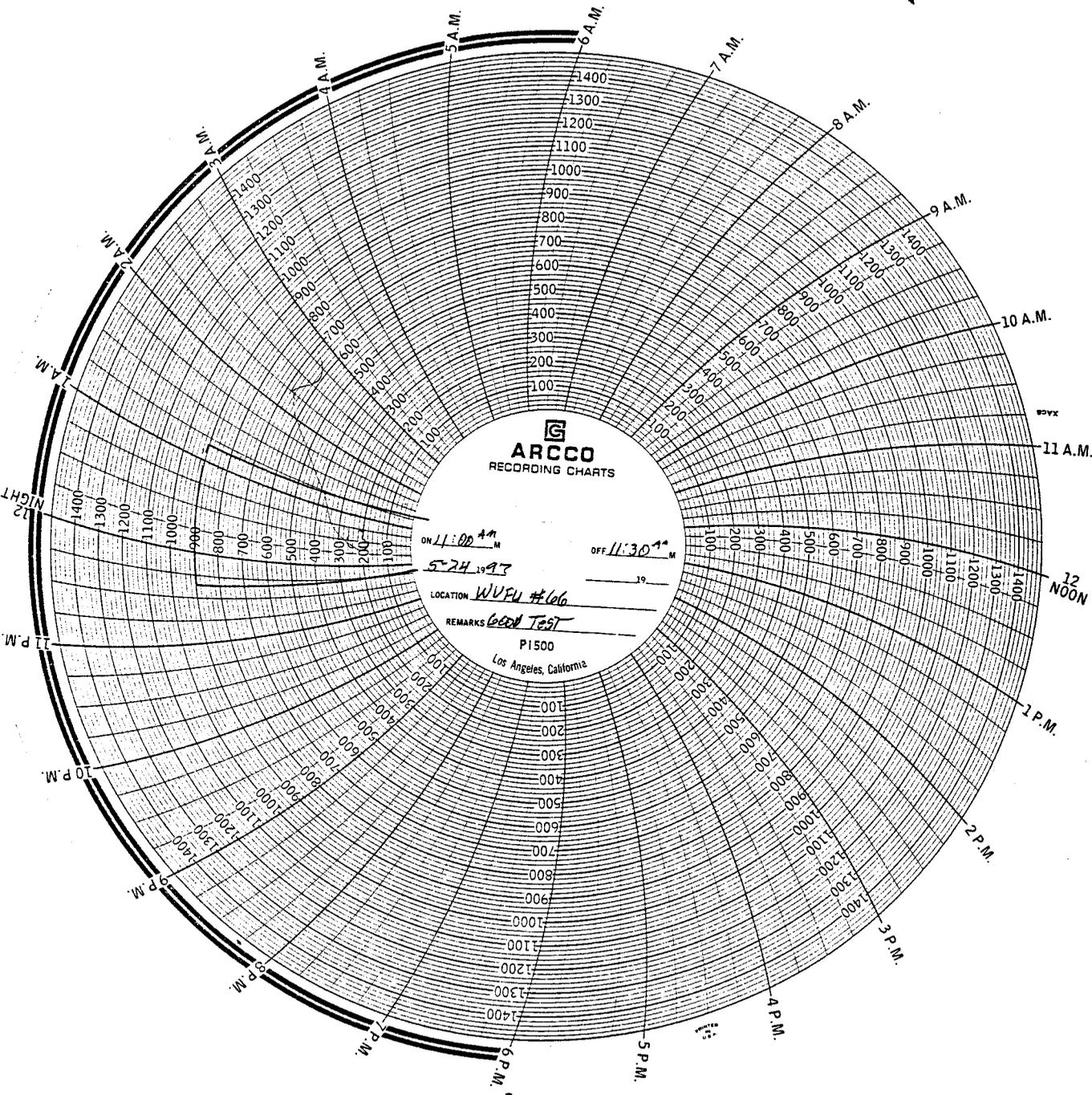
ON 11:00 AM
OFF 11:30 AM

LOCATION WVEU #66

REMARKS GOOD TEST

PI 1500

Los Angeles, California





Chevron

MAY 29, 1997

**MECHANICAL INTEGRITY TESTS
RED WASH AND WONSITS VALLEY FIELDS
UINTAH COUNTY, UTAH**

**Chevron U.S.A. Production Co.
Rocky Mountain Profit Center
Red Wash Asset Team
11002 East 17500 South
Vernal, UT 84078-8526
(801) 781-4300**

**MR. JOHN CARSON
UIC IMPLEMENTATION SECTION
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
999 18th STREET - SUITE 500
DENVER, CO 80202-2466
EFT-T**

Dear Mr. Carson:

Mechanical integrity testing results are enclosed for the following Class II ER wells:

RWU #25 (23-23B)	UT-02420	WVFU #61	UT-02495
RWU #34 (23-14B)	UT-02398	WVFU #66	UT-03098
WVFU #28-2	UT-02510	WVFU #68	UT-02498
WVFU #52	UT-02460	WVFU #140	UT-03508
WVFU #60	UT-03506	WVFU #143	UT-03509

Per EPA guidelines, all wells successfully passed the MIT. Our records indicate that tests for this group of wells completes required 1997 testing.

Sincerely,

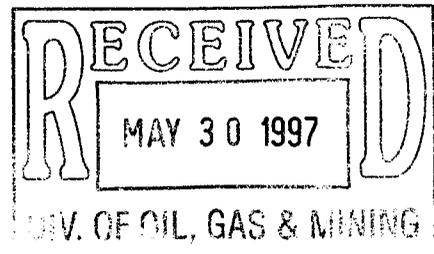
J. T. Conley For J.T. Conley

**J. T. CONLEY
RED WASH ASSET TEAM LEADER**

Enclosure

cc: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
P. O. Box 145801
Salt Lake City, UT 84114-5801
Attn. Mr. Gil Hunt

Bureau of Land Management
Vernal District Office
170 South 500 East
Vernal, UT 84078



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

1. Type of Well

Oil Gas
 Well Well Other WATER INJECTOR

2. Name of Operator

CHEVRON U.S.A. PRODUCTION COMPANY

3. Address and Telephone No.

11002 E. 17500 S. VERNAL, UT 84078-8526 (801) 781-4300

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

610' FSL & 1989' FEL (SW SE) SECTION 14, T8S, R21E, SLBM

5. Lease Designation and Serial No.

U-0807

6. If Indian, Allottee or Tribe Name

N/A

7. If Unit or CA, Agreement Designation

Wonsits Valley Federal Unit

8. Well Name and No.

Wonsits Valley Federal Unit 66

9. API Well No.

43-047-20042

10. Field and Pool, or Exploratory Area

Wonsits Valley - Green River

11. County or Parish, State

UINTAH, UTAH

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

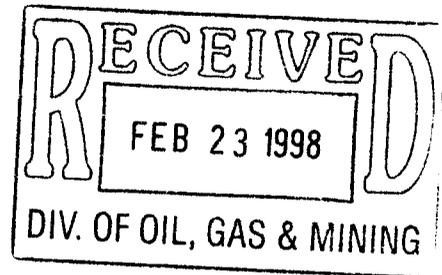
TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input checked="" type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> 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)

WE INTEND TO PLUG AND ABANDON THIS WELL PER THE ATTACHED.

Accepted by the State
of Utah Division of
Oil, Gas & Mining
Date: 2-25-98
By: *[Signature]*



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

Signed D. C. TANNER *[Signature]*

Title Computer Systems Operator

Date 2/19/98

(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.

WVFU #66
P&A PROCEDURE:

1. ND WH AND NU BOPE. RELEASE PACKER AND TOH WITH EQUIPMENT.
2. MAKE CLEAN OUT TRIP WITH BIT AND SCRAPER TO ~5050'.
3. **TOP PERFORATION AT 5102'**. SET CIBP AT 5050' AND CAP WITH 35' OF CLASS H. SPOT 9.2 PPG BRINE TO ~3200'.
4. **OIL SHALE INTERVAL AT 3362-3663'**. PERFORATE AT 3713', SET CICR AT 3312' AND SQUEEZE ~120 SX. CLASS H UNDER CICR. CIRCULATE CLEAN AND SPOT 9.2 PPG BRINE TO ~2000'.
5. **GREEN RIVER FORMATION TOP AT 2200'**. PERFORATE AT 2250', SET CICR AT 2150' AND SQUEEZE ~30 SX. CLASS H UNDER CICR. CIRCULATE CLEAN AND DISPLACE TO SURFACE WITH 9.2 PPG BRINE.
6. **SURFACE CASING SHOE AT 291'**. PERFORATE AT 300', ESTABLISH CIRCULATION DOWN 5-1/2" CASING AND UP 5-1/2" x 8-5/8" ANNULUS AND CEMENT WITH ~95 SX. CLASS H.
7. INSTALL MARKER PLATE PER BLM GUIDLEINES. RDMO.

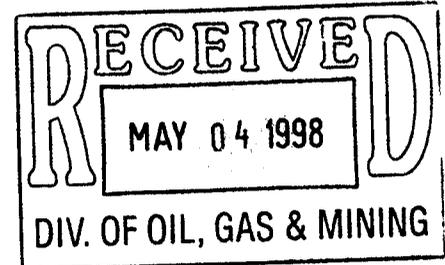


APRIL 29, 1998

WVFU #66
UT03098
WONSITS VALLEY FEDERAL UNIT
UINTAH COUNTY, UTAH

43-047-20042
Chevron U.S.A. Production Co.
Rocky Mountain Profit Center
11002 East 17500 South
Vernal, UT 84078-8526
(801) 781-4300

MR. JOHN CARSON
UIC IMPLEMENTATION SECTION
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
999 18th STREET - SUITE 500
DENVER, CO 80202-2466
8ENF-T



Dear Mr. Carson:

Documents detailing recent P&A work on the captioned Class II well are enclosed for your review and records. All work was witnessed by BLM personnel. If you have any questions or comments, please contact Steven McPherson at (435) 781-4310.

Sincerely,

J. T. CONLEY
RED WASH ASSET TEAM LEADER

cc Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
P. O. Box 145801
Salt Lake City, UT 84114-5801
Attn. Mr. Gil Hunt

U.S Department of the Interior
Bureau of Land Management
Vernal District Office
170 South 500 East
Vernal, UT 84078



PLUGGING RECORD

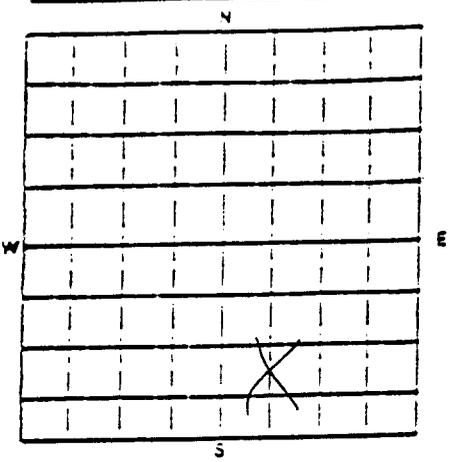
NAME AND ADDRESS OF PERMITTEE

Chevron USA
11,002 East 17500 South
Vernal, Utah 84078

NAME AND ADDRESS OF CEMENTING COMPANY

Halliburton
Vernal Utah

LOCATE WELL AND OUTLINE UNIT ON SECTION PLAT - 640 ACRES



STATE COUNTY

UT Utah

PERMIT NUMBER

UT-03098

SURFACE LOCATION DESCRIPTION

1/4 OF SW 1/4 OF SE 1/4 SECTION 14 TOWNSHIP 8S RANGE 21E

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface Location 410 ft. from (N/S) S Line of quarter section
and 1989 ft. from (E/W) E Line of quarter section

TYPE OF AUTHORIZATION

- Individual Permit
- Area Permit
- Rule

Number of Wells _____

Wonsits Valley Fed. Unit

Lease Name * 66

Describe in detail the manner in which the fluid was placed and the method used in introducing it into the well

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT(LB./FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
8 5/8"	24"		291'	12 1/4"
5 1/2"	14"		5220'	7 7/8"

WELL ACTIVITY

- CLASS I
- CLASS II
- Brine Disposal
- Enhanced Recovery
- Hydrocarbon Storage
- CLASS III

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- The Balance Method
- The Dump Saker Method
- The Two-Plug Method
- Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (Inches)	5 1/2"	5 1/2"	5 1/2"	5 1/2"	5 1/2"		
Depth to Bottom of Tubing or Drill Pipe (ft.)	4993'	4989'	3306'	2138'			
Bags of Cement To Be Used (each plug)	35	6	130	70	114		
Slurry Volume To Be Pumped (cu. ft.)	40.25	1.85	149.5	80.5	188.6		
Calculated Top of Plug (ft.)	5100'	4939'	3221'	2053'	Surface		
Measured Top of Plug (if tagged ft.)							
Slurry Wt. (Lb./Gal.)	15.8	15.8	15.8	15.8	15.8		
Type Cement or Other Material (Class III)	G	G	G	G	G		

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS

From	To	From	To
5102	5220		
3712	3713		
2249	2250		
241	242		

Signature of Cementer or Authorized Representative

RLM: Randy Bywater

Signature of EPA Representative

Chevron USA: S.W. Kellett 4-28-98

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (REF. 40 CFR 122.22)

NAME AND OFFICIAL TITLE (Please type or print)

J T CONLEY

SIGNATURE

DATE SIGNED

4-30-98

FIELD: Woods Valley WELL#: " 66 COUNTY: Uintah

LOCATION: SW/SE 14 - T 8 S - R 21 E API # 43 - 047 - 20042

Date Plugged: 4-28-98

LEASE#: U-0807

10" Arise Between All
Plugs.

EPA ID: UT - 03098

KB: ELEVATION: 4274

GL: ELEVATION: 4258

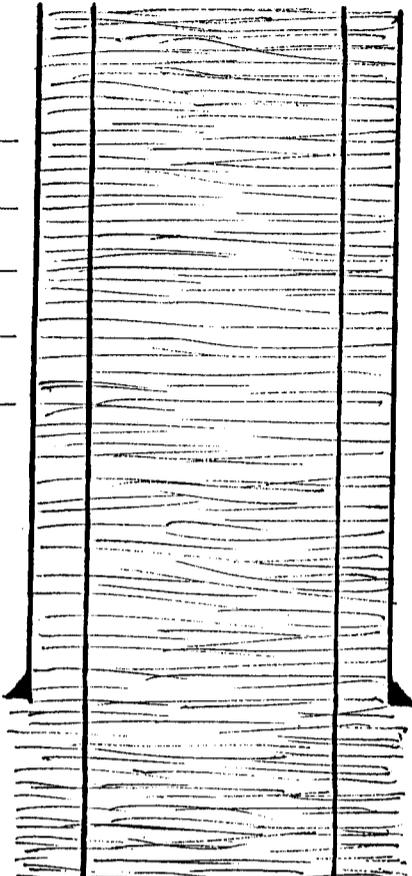
HOLE SIZE: 12 1/4

SURF. CSG.: 8 5/8" 24"

SET @: 291'

CEMENT: 200 SX

CMT. TOP: Surface



1 > Production PKR set @ 4993'
Pump 35 SX CLASS G cement Below
PKR. Calculated TOC @ 5100'

2 > set CIRC @ 4990' SPOT 6 SX 50'
ON CIRC TOC: @ 4939'

3 > Perforate 4SPF @ 3713'
SET CIRC @ 3306' Pump 120 SX
Below CIRC, SPOT 10 SX ON CIRC.

4 > Perforate 4SPF @ 2250'
SET CIRC @ 2138' Pump 60 SX Below
CIRC, SPOT 10 SX ON CIRC.

5 > Perforate 4SPF @ 341'

6 > Pump 164 SX G w/ 2% CaCl2 Down
5 1/2" cty. : up 5 1/2" x 8 5/8" Annular
TO SURFACE.

7 > cut off w.H. INSTALL
PIA marker.

Perforate 4SPF @ 341'
Pump 164 SX G w/ 2% CaCl2 Down 5 1/2"
cty. : up 5 1/2" x 8 5/8" Annular TO SURFACE.

CIRC @ 2138'
Pump 60 SX Below CIRC, SPOT 10 SX ON CIRC

Perforate 4SPF @ 2250'

HOLE SIZE: 7 7/8"

CSG.: 5 1/2" 14"

SET @: 5286'

CEMENT: 225 SX

Calc. TOC: 3221'
CIRC @ 3306'
Pump 120 SX Below CIRC, SPOT 10 SX ON CIRC

Perforate 4SPF @ 3713'

TOC: 4939'
CIRC @ 4990' SPOT 6 SX or 50' ON SAME

PERFORATIONS:

TOC: 5100' 35 SX CL.G. @ 15.8 PPT. 1.15 yield

5102-10

5204-20

PBTD @: 5260

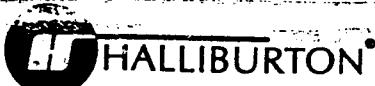
TD, @: 5287

REGION North America	NWA/COUNTRY RM NWA	BDA / STATE Utah	COUNTY Uintah
MBU ID / EMP # 11E0108 C1986	EMPLOYEE NAME CARL W. PARRACK	PSL DEPARTMENT 5001	CUSTOMER REP / PHONE Steve Keibert
LOCATION 055685	COMPANY Chevron	API / UWI #	
TICKET AMOUNT	WELL TYPE 01	JOB PURPOSE CODE 115	
WELL LOCATION Wonsit Valley	DEPARTMENT 5001		
LEASE / WELL # Wonsit Valley #66	SEC / TWP / RNG 15-14 T-8S R-21E		

| HES EMP NAME/EMP#(EXPOSURE HOURS) HRS |
|---|---|---|---|
| C PARRACK C1986 | T Munn T5662 | | |
| D Reynolds L2594 | | | |

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL)(GAL)	PUMPS		PRESS. (psi)		JOB DESCRIPTION / REMARKS
				T	C	Tbg	Csg	
3	15:05					250		Test casing
	15:10					1000		Test tubing
	15:11	3				163		Start Fresh Ahead
	15:15		10					End Fresh
	15:16	3				100		Start Cement @ 15.8 #
	15:21		14.5					End Cement
		3						Start Displace mud with Ben
	15:25		8			140		End Displace
			11			60		String out Leave 2 bbl on Top
	16:00							Release for Day
4	4:30							Called and safety meeting
	16:30							On location safety meeting
	7:16	3				150		Start Roll Hole with Fresh
	7:24		13			30		End
	7:40	3				90		Start Fresh Ahead
			15					End
	7:49	3				60		Start Cement @ 15.8 #
	7:58		33.5					End pumping
								Watch to see if Fall
	1:00 PM							Released

T Munn
11/28/98
11/28/98



JOB LOG

ORDER NO. 70006

TICKET # 70299
TICKET DATE 4-28-98

REGION North America	NWA/COUNTRY RMNUUA	BDA / STATE Utah	COUNTY Uintah
MBU ID / EMP # VED 108 1986	EMPLOYEE NAME CARL PARRACK	PSL DEPARTMENT 5001	CUSTOMER REP / PHONE Steve Kebeat
LOCATION OSSUS	COMPANY Chevron	API / UWI #	
TICKET AMOUNT	WELL TYPE 01	JOB PURPOSE CODE 115	
WELL LOCATION Wonsit Valley	DEPARTMENT 5001		
LEASE / WELL # Wonsit Valley #166	SEC / TWP / RNG S-14 T-2S R-21E		

| HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS |
|--|--|--|--|
| C. PARRACK 1986 | T. Nune 1566 | | |
| D. Reynolds 1294 | | | |

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL)(GAL)	PUMPS		PRESS. (psi)		JOB DESCRIPTION / REMARKS
				T	C	Tbg	Csg	
	4:30							Called out safety meeting
	6:30							On location, safety meeting, setup
①	7:30	3	4			400		Start Roll Hole with Brine
	7:45	3	68			432		
	2:55		105			620		
	8:02		135			600		End Rolling Hole 4080' 50' plus
	8:09	6	4			320		Start Fresh Ahead work U
	8:11		1.2					END
	8:12		1.5					Start Cement @ 15.8"
						270		END
	8:22		26.5					Start Brine
								END Brine
	8:57	4				600		POOH 5 joints
	8:41		27					Start Reverse
								END
②	10:50							POOH to Run Retainer
	10:00		18			200		Start Brine to fill hole
								Half Full
	11:54					250		RIH to 3306' with Retainer 130 SKS
	11:57					1500		Test Tubing 130 Below
	12:00	4				630		START INJECTING RATE 10 RATE
	12:05		20					END
	12:07	3.5	4					Start cement @ 15.8"
			26.6					END cement
	12:15	3.5	4					Start Displacement
	12:20		125					END Displacement
	13:55							POOH to post
								Fill casing
	14:28	3	4			180		Start IN. Rate
	14:34		12					END
								RIH to 2138' with Retainer

TICKET #	370299	TICKET DATE	4-28-98
BDA / STATE	Utah	COUNTY	Uintah
PSL DEPARTMENT	5001	CUSTOMER REP / PHONE	Steve Kerfoot
API / UWI #		JOB PURPOSE CODE	115

REGION	North America	NWA/COUNTRY	RMNWA
MBU ID / EMP #	VE0108 21986	EMPLOYEE NAME	CARL W PARRACK
LOCATION	055685	COMPANY	Chevron
TICKET AMOUNT		WELL TYPE	01
WELL LOCATION	Wansit Valley	DEPARTMENT	5001
LEASE / WELL #	Wansit Valley #66	SEC / TWP / RNG	S-14 T-8S R-21E

| HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS |
|---|---|---|---|
| CARRACK 21986 | T. Nunn 15662 | | |
| D Reynolds 62594 | | | |

HES UNIT NUMBERS	R/T MILES						
52807-75616	90	420851	90				
53936-5209	90						

Form Name _____ Type: _____
 Form Thickness _____ From _____ To _____
 Packer Type _____ Set At _____
 Bottom Hole Temp. _____ Pressure _____
 Misc. Data _____ Total Depth _____

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY	MAKE
Float Collar		
Float Shoe		
Guide Shoe		
Centralizers		
Bottom Plug		
Top Plug		
Head		
Packer		
Other		

MATERIALS

Treat Fluid	Density	Lb/Gal
Disp. Fluid	Density	Lb/Gal
Prop. Type	Size	Lb.
Prop. Type	Size	Lb.
Acid Type	Gal.	%
Acid Type	Gal.	%
Surfactant	Gal.	In
NE Agent	Gal.	In
Fluid Loss	Gal/Lb	In
Gelling Agent	Gal/Lb	In
Fric. Red.	Gal/Lb	In
Breaker	Gal/Lb	In
Blocking Agent	Gal/Lb	
Perfpac Balls	Qty.	
Other		

4 SK CACIA

DATE	CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
4-27	4:30	6:30	7:30	7:58

WELL DATA

	NEW/USED	WEIGHT	SIZE	FROM	TO	MAX ALLOW
Casing	USED	14	5 1/2		345	
Liner						
Liner						
Tbg/D.P.	USED		2 7/8		4989	
Tbg/D.P.						
Open Hole						SHOTS/FT.
Perforations						
Perforations						
Perforations						

HOURS ON LOCATION		OPERATING HOURS		DESCRIPTION OF JOB
DATE	HOURS	DATE	HOURS	
4-27	2.5	4-27	2.3	PTA
4-28	3	4-28	4	
TOTAL	11.5	TOTAL	2.7	

ORDERED	HYDRAULIC HORSEPOWER	Avail.	Used
TREATED	AVERAGE RATES IN BPM	Disp.	Overall
FEET	CEMENT LEFT IN PIPE	Reason	

CEMENT DATA

STAGE	SACKS	CEMENT	BULK/SKS	ADDITIVES	YIELD	LBS/GAL
1	6	AG-300	Bulk		1.15	5.0
2	130	AG-300	Bulk		1.15	5.0
3	20	AG-300	Bulk		1.15	5.0
4	104	AG-300	Bulk	2% CACIA	1.15	5.0

Circulating Breakdown	Displacement Maximum	Preflush:	Gal - BBI	Type
Average	Frac Gradient	Load & Bkdn:	Gal - BBI	Pad: BBI - Gal
Shut In: Instant	5 Min 15 Min	Treatment	Gal - BBI	Disp: BBI - Gal
		Cement Slurr	Gal - BBI	
		Total Volume	Gal - BBI	