

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
RECOMPLETION FORM
ACO-2 AMENDMENT TO WELL HISTORY

Operator: License # 5208
Name MOBIL OIL CORPORATION
Address P.O. BOX 5444

City/State/Zip DENVER, COLORADO 80217

Purchaser NORTHERN NATURAL GAS (ENROW)

Operator Contact Person B. R. MAYNARD

Phone (303) 298-2069

Designate Type of Original Completion

New Re-Entry Workover

Oil SWD Temp Abd
 Gas Inj Delayed Comp.
 Dry Other (Core, Water Supply, etc.)

Date of Original Completion: 5-9-87 TA'D 6-8-87

DATE OF RECOMPLETION

4-11-88 5-6-88
Commenced Completed

Designate Type of Recompletion / Workover:

Deepening Delayed Completion

Plug Back Re-perforation

Conversion to Injection / Disposal

Is recompletion production:

Commingled; Docket No. CD-7883

Dual Completion; Docket No. _____

Other (Disposal or Injection)?

FORMALLY THE OWEN DOWDY WELL #4

API No. 15- 189-21035 - 0001

COUNTY STEVENS

S/2 NE SE Sec 36 Twp 32S Rge 35 X East West

1840 Ft North from Southeast Corner of Section

660 Ft West from Southeast Corner of Section

(Note: Locate well in section plat below)

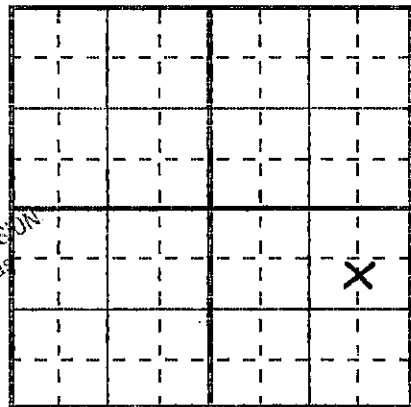
Lease Name MARCELLUS #1 UNIT WELL # 3

Field Name SHUCK, NW

Name of New Formation MORROW/CHESTER

Elevation: Ground 2931 FT. KB 2945' FT.

SECTION PLAT



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K.C.C. OFFICE USE ONLY

F Letter of Confidentiality Attached
C Wireline Logs Received
C Drillers Timelog Received

Distribution

KCC SWD/Rep NGPA
 KGS Plug Other
(Specify)

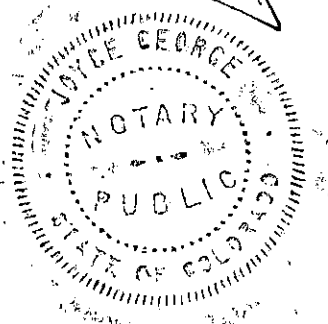
INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the recompletion of any well. Rules 82-3-107 and 82-3-141 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form. See rule 82-3-107 for confidentiality in excess of 12 months. One copy of any additional wireline logs and driller's time logs (not previously submitted) shall be attached with this form. Submit ACO-4 prior to or with this form for approval of commingling or dual completions. Submit CP-111 with all temporarily abandoned wells. NOTE: Conversion of wells to either disposal or Injection MUST receive approval before use; submit form U-1.

All requirements of statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature B. R. Maynard B. R. MAYNARD Title REGULATORY COMPLIANCE ENGINEER Date 8-16-88

Subscribed and sworn to before me this 16th day of August 19 88

Notary Public Joyce George Date Commission Expires 1/3/91



SIDE TWO

Operator Name MOBIL OIL CORPORATION Lease Name MARCELLUS #1 UNIT Well # 3

Sec 36 Twp 32S Rge 35 XX East
West County STEVENS

RECOMPLETION FORMATION DESCRIPTION
XX Log Sample

Name	Top	Name	Top
CHASE	2627'	CHEROKEE	5249'
WINFIELD	2727'	NORROW	5664'
COUNCIL GROVE	2970'	CHESTER	5917'
ADMIRE	3229'	STE. GENEVIEVE	6174'
WABAUNSEE	3350'	ST. LOUIS	6291'
LANSING	4226'		
KANSAS CITY	4649'		
HARMATON	5060'		

CONTINUED TOP RIGHT

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type & Percent Additives
Perforate	6105'	CL C	2 SX	
Protect Casing				
XX Plug Back TD				
Plug Off Zone				

Shots Per Foot	PERFORATION RECORD Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record
4 SPF	5866'-5876'	FRAC'D W/21,500 GALS GELLED ACID
4 SPF	5923'-5931'	FRAC'D W/14,400 GALS GELLED ACID
4 SPF	5993'-6006'	FRAC'D W/21,500 GALS GELLED ACID

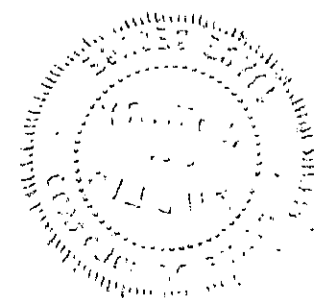
PBTD 6105' FT. Plug Type CAST IRON BRIDGE PLUG

TUBING RECORD:

Size NA Set At FT. Packer At FT. Was Liner Run Y XX N

Date of Resumed Production, Disposal or Injection WAITING ON PIPELINE

Estimated Production Per 24 Hours: 0 bbl/oil 15 bb/water
355 MCF gas ---- gas-oil ratio.



Mobil Oil Corporation FRAC DATA REPORT

WELL NAME AND NUMBER: Owen Dandy #4 DATE: 4-13-88
 STATE: KANSAS COUNTY: Stevens FIELD: N. Shuck
 FORMATION: Upper Chester PERFS: 5993-6006

STAGE	RATE-BPM	FLUID	CLEAN VOLUMES-GAL	PPG	SIZE PROPPANT	TUBING PRESSURE-PSI	CASING PRESSURE-PSI	PROPPANT-LBS
1	8	WF-140	1500	—	—	1600	500	—
2	8	DGA-215	1500	—	—	2000	460	—
3	8	2% KCL	2500	—	—	2230	420	16 BALL SEALERS
4	8	WF-140	1500	—	—	2620	320	—
5	8	DGA-215	1500	—	—	2540	280	—
6	8	2% KCL	2500	—	—	2800	200	16 BALL SEALERS
7	8	WF-140	1500	—	—	2710	140	—
8	8	DGA-215	1500	—	—	2600	110	—
9	8	2% KCL	2500	—	—	2600	70	14 BALL SEALERS
10	8	WF-140	1500	—	—	2770	10	—
11	8	DGA-215	1500	—	—	2700	-20	—
12	8	2% KCL	2000	—	—	3000	-60	—
TOTALS			21,500					

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ISIP: 2160 BASE FLUID: Duo-Frac (Gelled Acid)
 MAXIMUM PRESSURE: 3000 BREAKDOWN PRESSURE: 2800
 ISDP: 2160 5 MIN: 2007 10 MIN: 1980 15 MIN: 1940
 SERVICE LOCATION AND SERVICE ENGINEER: ULYSSES. CHARLES CAMBERN
 SERVICE COMPANY: DOWEN - SCHLUMBERGER
 REMARKS: EXTREMELY TIGHT ROCK! FRACTURE GRADIENT
CALCULATED OUT TO .79 psi/ft.
 MOBIL ENGINEER: M.P. STACKHOUSE SUPERVISOR: M. R. Schrechter

MOBIL DAILY COMPLETION OR WORKOVER REPORT

WELL NAME AND NO. OWEN DOWDY #4 AFE # 6EJ9

DATE <u>4/18-MAY/88</u>	REPORT NO <u>6</u>	COMP STARTED <u>4-11-88</u>	STATUS <u>Flow test</u>
SUPVR <u>M. P. Sebechter</u>	FIELD <u>North Shuck</u>	FORMATION <u>Upper Chester</u>	API WELL #
ENG <u>M. P. Stackhouse</u>	AREA <u>Hugoton</u>	PLRF'S <u>5393-6006</u>	
RIG <u>Patrick 16</u>	COUNTY <u>Stevens</u>	CASING DETAIL	
KR <u>2015</u> ZCND <u>2031</u>	STATE <u>Kansas</u>	<u>8 5/8", 24#, K-55</u>	@ <u>1/40</u>
TD <u>6370</u>	MOBIL W.I. <u>100%</u>	<u>5 1/2", 14#, K-55</u>	@ <u>6370</u>
PBTD <u>6287 6105</u> FROM	JOB CLASSIFICATION <u>12</u>		@
BBL'S WATER BBL'S OIL MCF		LNR TO	
DAILY REC <u>21</u>	GAS SP. GRAV	TGB/WS/DP DATA	
CUM REC <u>253</u>	OIL GRAV. @ °F	OD	W/FT
LOAD <u>601</u>	CHLORIDES	GRADE	CONNECTION
LEFT TO REC <u>348</u>	ACID TRAC		LENGTH

FROM	TO	HRS	OPER CODE	DESCRIPTION OF OPERATIONS
				4-18 - 1430 PSI on TBQ - Start flow thru 3/8 choke - flow all day 51 R 800 PL - 170 MCFD
				4-19 - 1200 PSI - start flow thru 3/8 choke - flows till 5:00 PM - 175 MCFD Total recovery for 2 days - 2100 PL
				4-20 - 1200 PSI - Blow well down - pumped 50 BRC 2% KCL to keep well dead - tried to unseat packer - wouldn't open by pass - feathered to 20 M ² wouldn't move - Rig up dia-log + run from point - packer seemed to be missing - singles out line + pulled 20M pulled from top of string + plug down back side - comp was full - left tension a tray overnight to see if it would clean thru by pass
				Stands

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Wichita, Kansas

AFE APPROVED		ACTUAL	
		DAILY COMP.	\$
		PREVIOUS COMP	\$
DRY HOLE	\$	CUMULATIVE COMP.	\$
SUSPENDED	\$	SUSPENDED COST	\$

Mobil Oil Corporation FRAC DATA REPORT

WELL NAME AND NUMBER: Owen Dowdy #4 DATE: 4.22.88
 STATE: KANS COUNTY: Stevens FIELD: W. Shuck
 FORMATION: Upper Chester PERFS: 5923-5931

STAGE	RATE-BPM	FLUID	CLEAN VOLUMES-GAL	PPG	SIZE PROPPANT	TUBING PRESSURE-PSI	CASING PRESSURE-PSI	PROPPANT-LBS
1	8	WF-140	1334			1680	500	
2	8	DGA-215	1334			2430	400	
3	8	2% KCL	2200			2220	350	14- Ball sections
4	8	WF-140	1333			1520	350	
5	9	DGA-215	1333			1740	350	
6	10	2% KCL	2200			1580	450	14- Ball sections
7	10	WF-140	1333			1870	550	
8	8 10	DGA-215	1333			1990	600	
9	10	2% KCL	2000			1900	600	
TOTALS			14,400					

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 Wichita, Kansas

ISIP: 960 BASE FLUID: Duo-Frac. (Gelled Acid)
 MAXIMUM PRESSURE: 2600 BREAKDOWN PRESSURE: 2450
 ISDP: 960 5 MIN: 840 10 MIN: 780 15 MIN: 740
 SERVICE LOCATION AND SERVICE ENGINEER: Wyssee - Charles Camborn
 SERVICE COMPANY: Dowell - Seblunberger
 REMARKS: _____

MOBIL ENGINEER: Stackhouse SUPERVISOR: W. Seblunberger

Mobil Oil Corporation FRAC DATA REPORT

WELL NAME AND NUMBER: Owens Dandy #4 DATE: 4-28-88
 STATE: Kans COUNTY: Stevens FIELD: N. Shark
 FORMATION: Leffler Chester PERFS: 5866-5876

STAGE	RATE-BPM	FLUID	CLEAN VOLUMES-GAL	PPG	SIZE PROPPANT	TUBING PRESSURE-PSI	CASING PRESSURE-PSI	PROPPANT-LBS
1	4	WF-140	1500			430	490	
2	8	DGA-215	1500			1460	270	
3	10	2% KCL	2500			1750	250	12 Ball Seals
4	10	WF-140	1500			1850	210	
5	10	DGA-215	1500			2050	190	
6	10	2% KCL	2500			1990	190	12 Ball Seals
7	10	WF-140	1500			2110	190	
8	10	DGA-215	1500			1930	180	
9	10	2% KCL	2500			2130	170	12 Ball Seals
10	10	WF-140	1500			1770	170	
11	10	DGA-215	1500			2120	170	
12	10	2% KCL	2000			2130	170	
TOTALS			21500					

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ISIP: 1250 BASE FLUID: Gellup Acid
 MAXIMUM PRESSURE: 2140 BREAKDOWN PRESSURE: 1450
 ISDP: 1750 5 MIN: 1040 10 MIN: 950 15 MIN: 910
 SERVICE LOCATION AND SERVICE ENGINEER: DS - Wysses Charles Canborn
 SERVICE COMPANY: Dowell Schlumberger
 REMARKS: _____

MOBIL ENGINEER: Starkhausen SUPERVISOR: Schuchter

MOBIL DAILY COMPLETION OR WORKOVER REPORT

WELL NAME AND NO. OWEN DOWDY #4 AGE # 6EJ9

DATE <u>5/2-6/88</u>	REPORT NO <u>14</u>	COMP STARTED <u>4-11-88</u>	STATUS <u>Flow test - P.U. RBP</u>
SUPVR. <u>M.R. Schuchler</u>	FIELD <u>North Shuck</u>	FORMATION _____	API WELL # _____
ENG <u>M. P. Stackhouse</u>	AREA <u>HUGOTON</u>	PERI'S <u>5866-26</u>	<u>5923-31</u>
RIG <u>Patrick - 16</u>	COUNTY <u>Stevens</u>	CASING DETAIL	
KB <u>2945 ZERO 2931</u>	STATE <u>Kansas</u>	<u>8 5/8", 24#, K-55</u>	@ <u>1746</u>
TD <u>6370</u>	MOBIL W.I. <u>100%</u>	<u>5 1/2", 14#, K-55</u>	@ <u>6370</u>
PBTD <u>6267/6105</u> FROM _____	JOB CLASSIFICATION <u>12</u>	_____	@ _____
BELS WATER BILS OIL MCF		LNR _____ TO _____	
DAILY REC _____	GAS SP. GRAY _____	TGB/WS/DP DATA	
CUM REC _____	OIL GRAY _____ @ _____ °F	OD _____	#/FT _____
LOAD _____	CHLORIDES _____	GRADE _____	CONNECTION _____
LEFT TO REC _____	ACID _____	LENGTH _____	

FROM	TO	HRS	OPER CODE	DESCRIPTION OF OPERATIONS
				5:2 - Flow test all day - recovered 12 BBL SLOW
				5-3 - Killed well w/80 BBL KCL - Pull packer - return BP - pulled 34 stands 7Mg. wind to high - SLOW
				5-4 - Finish pulling RBP. Run model 1" packer & set @ 5825 Start swabbing - well flows 37 BBL SLOW
				5-5 - 1400* on string - flowed then 70 chokes @ 200* (recovery 4 BPH) gas rate approx 600 MCF SLOW
				5-6 - 1460* on string - start flowing to loss packer Release rig - but well clean up for test -
				Final Report

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 WICHITA, KANSAS

AFE APPROVED	ACTUAL
	DAILY COMP \$
	PREVIOUS COMP \$
DRY HOLE \$	CUMULATIVE COMP \$