LEASE CODE #: 340216
LEASE: BATES UNIT WELL: 4-~~23~~ 05
FIELD: BATES , RESERVOIR : MISS
COUNTY: SUMNER , STATE: KS
OPERATOR: PHILLIPS PETROLEUM CO

McGee Energy Services, Inc. and Clients makes no representation or warrants with respect to any of this information.

P H I L L I P S - P R O D U C T I O N - L E D G E R

DATE	OIL, BBL	CUM-OIL	GAS, MCF	CUM-GAS	GOR, CF/BBL	WATER, BBL	WATER CUT, %	DAYS ON
PRIOR	11,240	11,240	0	0	0	180,042	94.12	2831
1/93	43	11,283	0	0	0	1,643	97.45	31
2/93	38	11,321	0	0	0	1,484	97.50	28
3/93	43	11,364	0	0	0	1,616	97.41	31
4/93	37	11,401	0	0	0	1,500	97.59	30
5/93	38	11,439	0	0	0	1,444	97.44	29
6/93	35	11,474	0	0	0	1,500	97.72	30
7/93	35	11,509	0	0	0	1,550	97.79	31
8/93	36	11,545	0	0	0	1,450	97.58	29
9/93	42	11,587	0	0	0	1,500	97.28	30
10/93	42	11,629	0	0	0	1,550	97.36	31
11/93	41	11,670	0	0	0	1,500	97.34	30
12/93	40	11,710	0	0	0	1,550	97.48	31
TOT/93	470	11,710	0	0	0	18,287		
1/94	36	11,746	0	0	0	1,576	97.77	31
2/94	27	11,773	0	0	0	1,467	98.19	28
3/94	30	11,803	0	0	0	1,624	98.19	31
4/94	27	11,830	0	0	0	1,572	98.31	30
5/94	27	11,857	0	0	0	1,624	98.36	31
6/94	25	11,882	0	0	0	1,551	98.41	30
7/94	9	11,891	0	0	0	1,308	99.32	31
8/94	7	11,898	0	0	0	1,224	99.43	29
9/94	8	11,906	0	0	0	1,266	99.37	30
10/94	8	11,914	0	0	0	1,266	99.37	31
11/94	8	11,922	0	0	0	1,266	99.37	30
12/94	8	11,930	0	0	0	1,308	99.39	31
TOT/94	220	11,930	0	0	0	17,052		
1/95	8	11,938	0	0	0	1,308	99.39	31
2/95	7	11,945	0	0	0	1,182	99.41	28
3/95								
4/95								
5/95								
6/95								
YTD/95	15	11,945	0	0	0	2,490		
TOTAL	11,945	11,945	0	0	0	217,871		

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PHILLIPS PETROLEUM COMPANY

November 5, 1985

Completion Letter
Phillips Petroleum Company Bates Unit # 4-5
C SE/4 Section 36-30S-2W
Bates Field
Sumner County, Kansas
PPCo. W. I. 84.015%

To: Well File

From: S. P. Haas SPH

The subject well was spudded on January 29, 1985 and was completed as a Mississippi Lime oil well on February 21, 1985.

The following are interpretations based on well logs, samples and drilling data:

FORMATION TOPS

FORMATION	DEPTH	SUBSEA DEPTH (KB 1329')
Lansing-Kansas City	3087	(-1758)
Marmaton	3398	(-2069)
Cherokee	3580	(-2251)
Mississippi Chert	3737	(-2408)
Mississippi Lime	3743	(-2414)
RTD	3840	(-2511)

Correlation: The subject well is 8 ft. structurally low to the northwest offset on the top of the Mississippi Chert. The northwest offset is the PPCo. Bates Unit # 3-4, NW SE Sec. 36-30S-2W, which produces oil from the Mississippi Lime.

CORES

No cores were taken.

TESTS

No tests were run.

COMPLETION

5-1/2" production casing set at 3838'.

Perf. 3737-39, 3742-45, 3748-50, 3762-66, 3787-92 (Mississippi Lime): IPP 20 BO + 79 BWPD, API Gr. 42°.

OTHER POTENTIAL PAYS

There are no other potential pays.

2-ACCT. 2011-2-3-4 34021 SC06 1C

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APPROVED COPIES TO:
- [ ] COMPTROLLERS
- [X] TREASURY
- [X] PURCHASING
- [ ] CORP. ENGR.
- [ ] CORP. PLAN./DEVEL.
- [X] GROUP PLAN./BUDGET (2)
- [ ] _____
- [ ] _____

AUTHORITY FOR EXPENDITURE

AFE NO. P-AG33

Phillips Petroleum COMPANY

E&P GROUP

Western Division PERFORMANCE CENTER

- [X] ORIGINAL
- [ ] REVISION NO.
- [ ] CANCELLATION

DATE December 12, 1984

TO THE [X] MCR Engineering Manager [ ] GROUP EXECUTIVE [ ] EXECUTIVE COMMITTEE

AUTHORITY IS HEREBY REQUESTED TO: Drill and equip Bates Unit Well No. 4-5, a 3800 ft. development oil well, located C SE/4 Sec. 36-30S-2W, Sumner County, Kansas.

DESCRIPTION OF PROPOSAL AND BASIS FOR NEED: Early approval is requested in order to maximize ultimate oil recovery and improve the total Unit economics. The performance of the last development wells drilled, Bates Unit No. 5-4 and No. 3-4, indicates no apparent well interference with increased well density. An additional development well should recover , barrels of incremental oil and produce a net profit to Phillips of after taxes.

Phillips Petroleum Company (Operator)	84.0150%
Non-Operating Partners	15.9850%

NOTE: Additional $23,000 gross for surface pumping equipment included in economics.

CLEAR TO	GROSS COST	OUR NET COST
EXPENSE	$	$
INVESTMENT	$ 151,000	$ 126,863
CURRENT APPROVAL REQUIRED	$ 151,000	$ 126,863
PREVIOUS APPROVAL	$	$
REVISED TOTAL ESTIMATE	$	$

PHILLIPS TOTAL EXPOSURE
- AARR _____ %
- PAYOUT _____ YRS.
- NTER _____ TIMES
- ECONOMIC LIFE 10 YRS.
- CONSTRUCTION _____ MOS.

PROJECT CLASSIFICATION: [ ] OPERATING NECESSITY [X] PAYOUT I [ ] PAYOUT II [ ] DISCRETIONARY(E&P ONLY)

ENVIRONMENTAL: WILL ENVIRONMENTAL PERMITS BE REQUIRED? [ ] YES [X] NO

BUDGET DATA	WESTERN
BUDGET ITEM NO. MID	5-3 (1984)
AMOUNT REQUESTED	126,863
AMOUNT BUDGETED	126,863
OVER (UNDER) BUDGET	
PROPOSED CHARGE:	
CONTINGENCY FUND	
PRIOR YEAR ACCT.	
BUDGET SUBST.	

CLEARANCES	OBTAINED	NOT REQ'D
LEGAL		X
TREASURY		X
CORP. ENGR.		X
COMPTROLLERS		X
TAX		X
PET/CHEM/ G & GL		
SUPPLY		X
SUPPLY CODE *		
OTHER ( )		

ATTACHMENTS	
FORM 3938	X
FORM 3939	X
FORM 3940	X
COST ESTIMATE	X
MAPS & PLATS	X
GROUP COMMENTS	
CP & D COMMENTS	
Performance Curves	X
Form 4614-S	X

ESTIMATED EXPENDITURE SCHEDULE (NET INVESTMENT)

19 85		19	$
1Q	$ 126,863	19	$
2Q	$	19	$
3Q	$	19	$
4Q	$	19	$

* SUPPLY CODES
- A FIRM, PAYOUT PERIOD
- B FIRM, _____ MONTHS
- C UNDER NEGOTIATION
- D NEGOTIATIONS NOT STARTED
- E NOT CRITICAL
- I INSIDE SOURCE
- O OUTSIDE SOURCE

REVIEW/APPROVAL	DATE	SIGNATURE
PERFORMANCE CENTER	12-11-84	R. A. Easterly
	12-12-84	Paul J. Kleater
GROUP PLAN./BUDGET		
GROUP EXECUTIVE		

	DATE	SIGNATURE
CORP. PLAN./DEVEL.		
EXEC. COMMITTEE		
BOARD OF DIRECTORS		

FORM 2320-S 12-80

McGee Energy Services, Inc. and Clients makes no representation or warrants with respect to any of this information.

Phillips Petroleum

JUSTIFICATION AND PREMISES

DATE December 12, 1984

PROJECT TITLE Drill and Equip Bates Unit Well No. 4-5

(DISCUSS BACKGROUND, PAST FINANCIAL HISTORY AND PRESENT SITUATION, IMPACT ON FUTURE PROJECTION FOR PRODUCT LINE, DEFICIENCIES AND/OR NEED FOR PROJECT, FIT WITH LONG-RANGE PLANS, FEEDSTOCK AND FUEL SUPPLY, MARKET SITUATION INCLUDING PRICING, PHYSICAL FACILITIES AND TECHNOLOGY, MANPOWER REQUIREMENTS, BENEFITS TO BE REALIZED AND WHO WILL DO THE JOB. INCLUDE LIST OF BASIC PREMISES. USE ADDITIONAL PAGES IF NECESSARY.)

The Bates Unit was purchased by Phillips in 1973 from Beardmore Drilling Company as an ongoing waterflood project. The waterflood project was relatively new when purchased by Phillips. Initial drilling in the field began in 1967, and the waterflood unit was formed in 1969 when primary production was still at a relatively high level.

Since initiating the waterflood, there has been no clearly defined response to injection other than a gradual arresting of BHP decline and a few instances of small increases in production early in the project. Water-oil ratios have remained low, even in wells directly offsetting the injection wells. It appears that injected water flows to the lower water phase of the reservoir sustaining BHP, consequently, the location of producers with respect to the injection wells is of little consequence. Current EDP production and injection data for wells on the west 320 acres of the Unit, where all injection and development drilling is located, is summarized as follows:

Well No.	Production BOPD	Production BWPD	Injection BWPD	Cumulative Oil Recovery, BO
4-1	16.9	0.9		69,538
4-2	20.7	10.4		124,538
4W-3			1377	
4-4 (EDP 3-4)	18.8	9.4		24,835
5-1	15.0	0.9		106,308
5W-2			795	
5-3	9.4	4.7		26,538
5-4	31.9	1.9		32,449

As shown by the attached decline curves, development well No. 3-4 and No. 5-4 were completed early in 1982 and late in 1981 respectively. There is no evidence that production from these wells has reduced offset production, and the wells are apparently producing incremental oil. Initial production and estimated ultimate recovery for these wells is summarized as follows:

McGee Energy Services, Inc. and Clients makes no representation or warrants with respect to any of this information.

PHILLIPS OIL COMPANY
A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY
EXPLORATION AND PRODUCTION GROUP

OKLAHOMA CITY, OKLAHOMA 73102
101 NORTH ROBINSON PHONE: 405 239-2611

December 19, 1984

RE: Bates Unit Waterflood
Sumner County, Kansas
Proposal to drill and equip
Well No. 4-5

THE WORKING INTEREST OWNERS
BATES UNIT

Approval is requested to drill and equip Bates Unit Well No. 4-5, a 3800 ft. development oil well, located C-SE/4 Sec. 36-30S-2W, Sumner County, Kansas. The estimated gross cost to drill and equip the well is $173,000, including $23,000 for surface pumping equipment. Based on a predicted initial production rate of 30 BOPD and recoverable reserves of 43,700 BO, the total cost of $173,000 will payout in 1.45 years, provide an A.A.R.R. of 69.2%, and return the expenditure 2.77 times. Please execute the attached cost estimates in the space provided and return one (1) copy of each to the above address, attention: Unit Representative.

The enclosed structure map shows the proposed location approximately mid-way between Well No. 3-4 and Well No. 4-1. The location is structurally the most favorable undeveloped location on the Bates Unit. It is expected to be structurally equal to, or better, than any existing Unit well except No. 3-4 (NW-SE Sec. 36, designation is being changed to No. 4-4). Expected performance of the proposed Well No. 4-5 has been estimated from the performance of the two most recently drilled development wells, No. 3-4 and No. 5-4, for which production curves are attached. Your early consideration of the proposed well is requested.

Very truly yours,
PHILLIPS PETROLEUM COMPANY

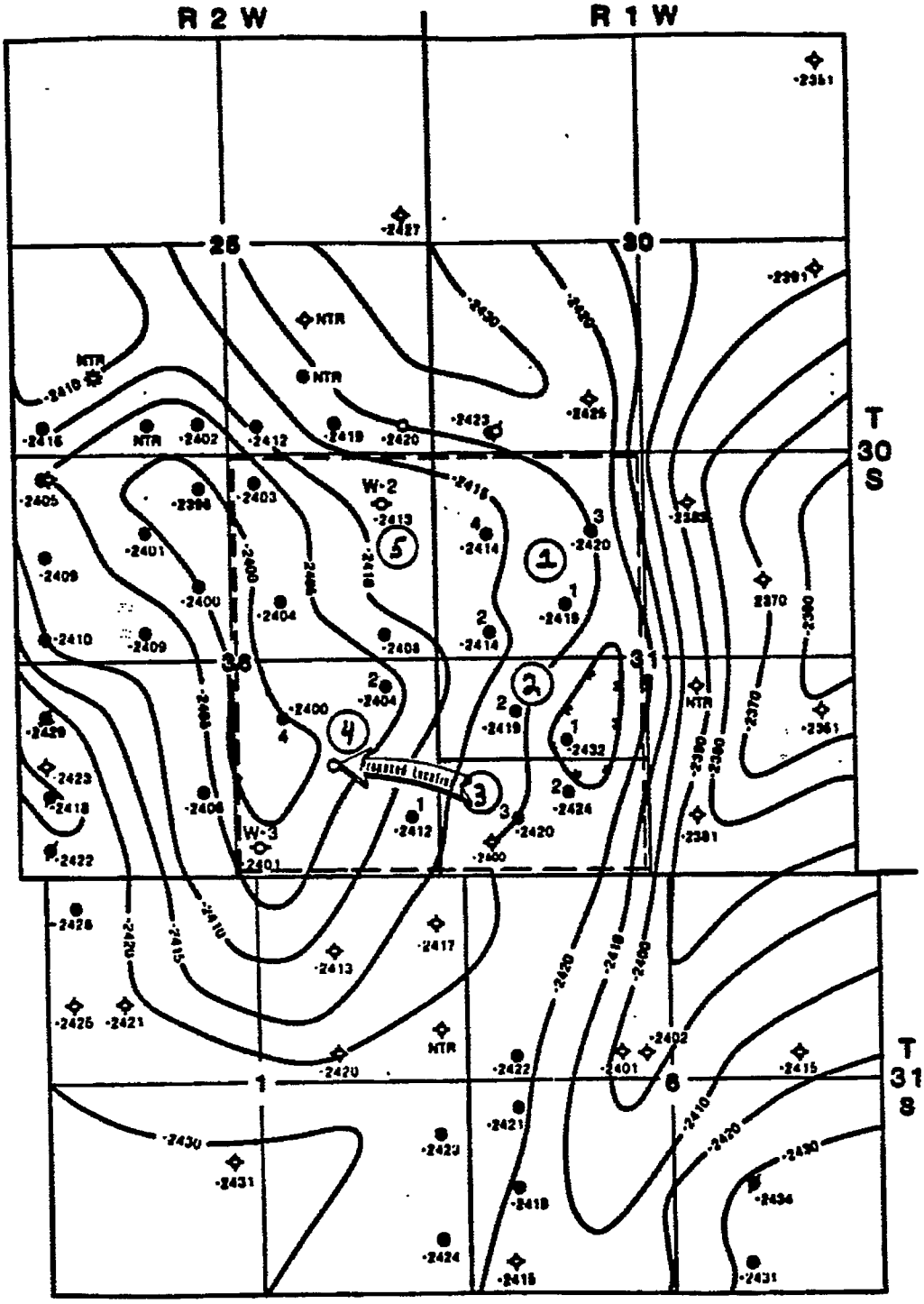
R. A. Easterby

R. A. Easterby, Agent
Unit Representative

RAE/LDH:lds

Attachments

cc: R. D. Stiehler (with attachments)
(r) P. J. Shanor
(r) Unit File
K. Westby (Great Bend - with attachments)
J. K. Fetters (Denver - without attachments)



Phillips oil Company
Bates Unit
Sumner County, Kansas
1"= 2000'

CONTOURED ON Top of Mississippi chert

TYPE INFO Structure c. i. 5' & 10'

GEOL BY S.P.H. DATE 10/84

DRAWN BY _____ DATE _____

McGee Energy Services, Inc. and Clients makes no representation or warrants with respect to any of this information.