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UNITED STATES PARTMENT OF THE INTERIOR

	DEPARTMENT				4.644	5. LEASE DESIGNATION AND SERIAL NO.	
		SICAL SURVE	Y A	PI 30-039	- 21299	Lse. Contract #11 6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
APPLICATION	FOR PERMIT T	O DRILL, D	EEPE	N, OR PLUG	BACK_	Jicarilla Apache	
1a. TYPE OF WORK		DEEPEN [_	PLUG BA		7. UNIT AGREEMENT NAME	
	L X	DEEPEN L	J	FLOG DA			
OIL GA	S X OTHER		SIN		LIPLE X	8. FARM OR LEASE NAME	
2. NAME OF OPERATOR	495					J. Apache "B"	
Amerada liess	Corporation, I	tt: Drilli	ng Se	rvices	 	9. WELL NO.	
3. ADDRESS OF OPERATOR		F. 30	^			10. FIELD AND POOL, OR WILDCAT	
P.O. Box 2040), Tulsa, Oklaho	orna 7410	L ang S	tata requirements *)	71599	Perm Dakona and	
4. LOCATION OF WELL (Re	port location clearly and	in accordance with	n any s	, and the requirement of		11. SEC. T., E. M., OR BLK. AND SURVEY OR AREA	
-1650- F51	and 1280 rwl					1	
At proposed prod. zone	e					K- Sec. 29, T2411, R5W	
14. DISTANCE IN MILES A				• .		12. COUNTY OR PARISH 13. STATE	
	W of Lindrith					Rio Arriba New Mex.	
15. DISTANCE FROM PROPU				. OF ACRES IN LEASE	. TO	OF ACRES ASSIGNED	
LOCATION TO NEAREST PROPERTY OR LEASE L (Also to nearest drig	INE, FT.	12801	256	65.64	5/320 t	o Dakota & 160 to Pictured	
18. DISTANCE FROM PROP TO NEAREST WELL, D	OSED LOCATION*	40001	19. PR	OPOSED DEPTH	20. ROTA	ARY OR CABLE TOOLS	
OR APPLIED FOR, ON THE	IS LEASE, FT.	•	<u> </u>	6,8001		Rotary	
21. ELEVATIONS (Show who	ether DF, RT, GR, etc.)	595 gr	c: /p	Con 20)		July 15, 1976	
	Gr. Elev. (Pro					0013. 17, 17, 17, 10	
23.	1	PROPOSED CASI	NG ANI	CEMENTING PROC	GRAM		
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER F	00T	SETTING DEPTH		QUANTITY OF CEMENT	
12-1/4"	9 - 5/8"0D	32.3#		3501+/-) sx. and circ.	
7_7 /8"	לוט"(2) 5–1/2	15.5#		68001+/-	750 8	sx. & est. top @ surface.	
circ. cmt.), WO	C approx. 18 hr sufficient dep and cement 5½°C	es., drill o th to test DD 15.5# nev	out u the v cas	nder surface Dakota gas z _e	e csg. Wi me, log	9-5/8" csg. with 250 sx. cmt ith a 7-7/8" bit to a propose well and if well indicate sx. cement with a 2 stage	
	atom toot are	, antidiusta	ad				
o cores or dril	T Scell rese are	: anororpaos	5U.				
isc. 60/70 for	logging.					der surface csg. to TD with aps, palts and drilling rig	
ayout plan to f	ollow under ser	perate cove	r.				
in above space describe zone. If proposal is to preventer program, if an	drill or deepen direction	nwonced is to doe	epen or at data	plug back, give data o on subsurface location	on present prons and measur	oductive zone and proposed new productive red and true vertical depths. Give blowout	
24. SIGNED E.	my	т	(.) alti	pervisor,	CEVE	dm. Serv. May 4, 1976	
(This space for Fed	ieral or State office use)						
(IIII) space for Fed	01 01 02 100/			JUN	4 197	6	
PERMIT NO.				APPROVAL DATE			
		A ^c		` .	CON. COM	M. DÁTE	
APPROVED BY	VAL, IF ANY :		ITLE		HST 3		
(Il al						

F	orm	9-3
(May	196

UNITED STATES SUBMIT IN TRIPLICATE* (Other instructions on reverse side) GEOLOGICAL SURVEY

Form approved. Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

Lease Contract #11

INDRY	NOTICES	AND	REPORTS	ON	WELLS
ハソレハ !	INCLI	ΔM	IVEL OIVIS	O, 1	* * * * * * * *

•	20000000		l		
SUNDRY NOT	6. IF INDIAN, ALLOTTEE OR TRIBE NAME Jicarilla Apache				
1. OIL GAS WELL X OTHER			7. UNIT AGREEMENT NAS	ME	
2. NAME OF OPERATOR			8. FARM OR LEASE NAME		
Amerada Hess Corporati	on, Att: Drilling Se	rvices	J. Apache "B"		
3. ADDRESS OF OPERATOR			9. WELL NO.		
P.O. Box 2040, Tulsa,	Oklahoma 741		16		
4. LOCATION OF WELL (Report location See also space 17 below.) At surface	Dakota and Pictured Cliffs				
Amended to: 1850' FS	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA				
			Sec. 29, T2	4N, R5W	
14. PERMIT NO.	15. ELEVATIONS (Show whether D	F, RT, GR, etc.)	12. COUNTY OR PARISH	13. STATE	
	Amended to: Gr. E	Clev. 6595'	Rio Arriba	N. Mex.	
16. Check A	ppropriate Box To Indicate N	Nature of Notice, Report, or	Other Data		
NOTICE OF INTE	NTION TO:	SUBSE	QUENT REPORT OF:		
TEST WATER SHUT-OFF	PULL OR ALTER CASING	WATER SHUT-OFF	REPAIRING V		
FRACTURE TREAT	MULTIPLE COMPLETE	FRACTURE TREATMENT	ALTERING CA		
SHOOT OR ACIDIZE	ABANDON*	SHOOTING OR ACIDIZING	ABANDONME	NT*	
REPAIR WELL	CHANGE PLANS	(Other)			
	(Other) Amend location footage & Elev x (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)				
	/ 60 . 1	+	a including agtimated dat	a of starting at	

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.)

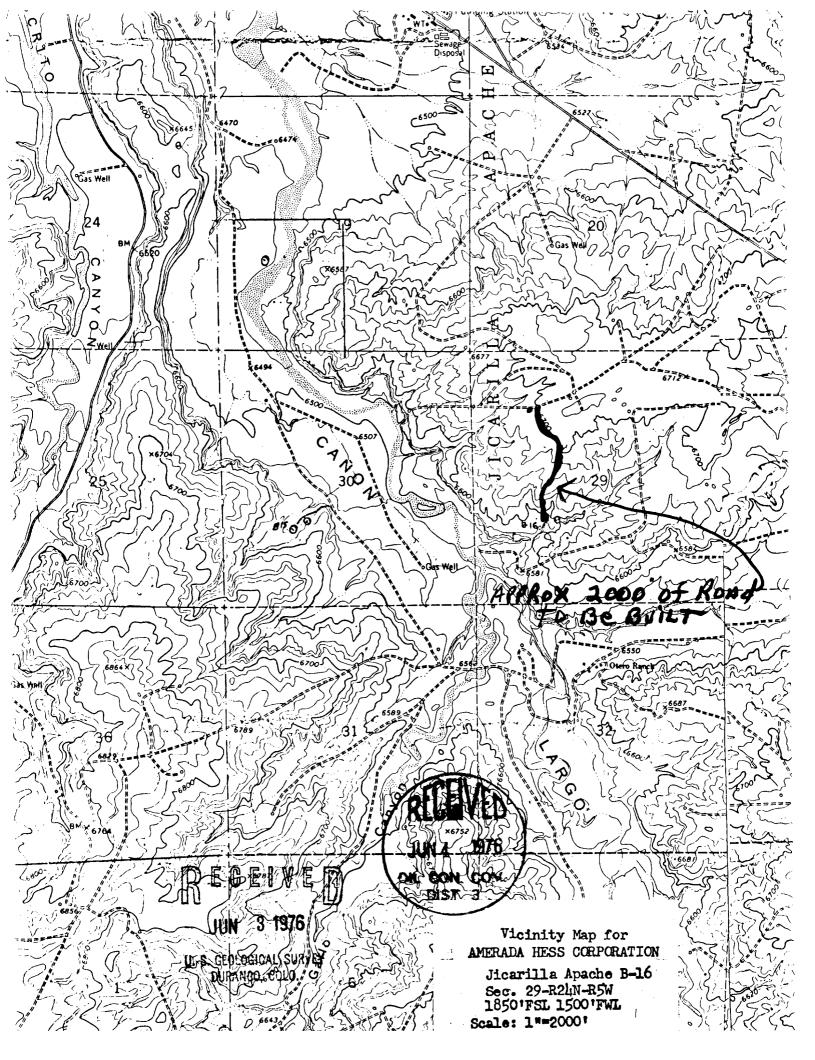
Sundry Notice and Report is to amend footage and ground elevation as submitted on original Form 9-3310 "Application for Permit to Drill" dated May 4, 1976.

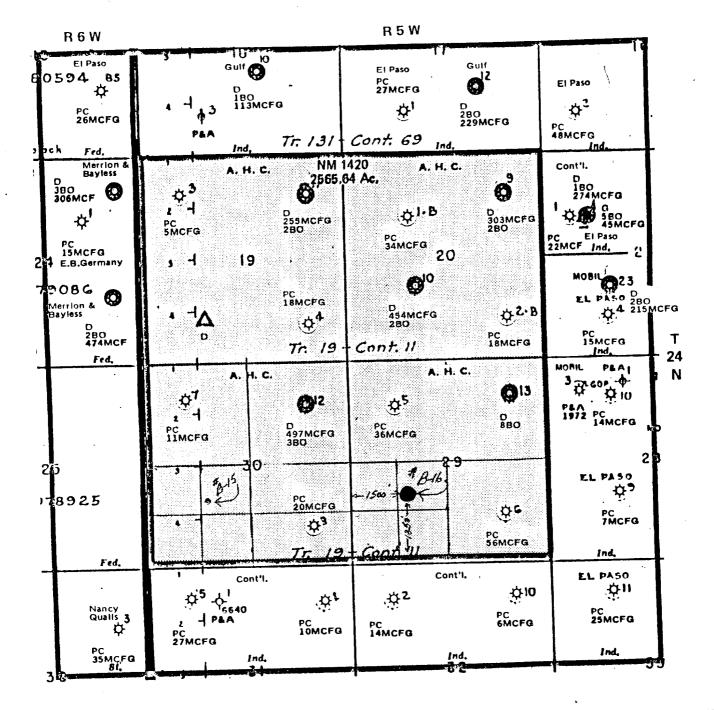


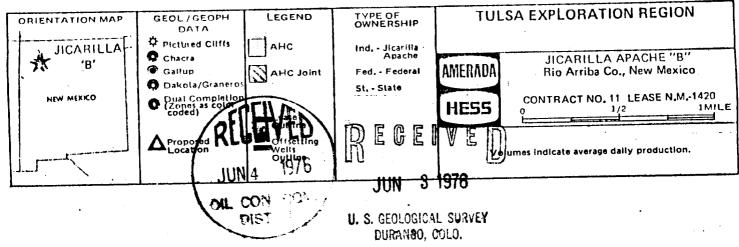
		CON
18. I hereby certify that the foregoing is true and correct	Supervisor, Drlg.	Adm. Serv. Nay 28, 1976
(This space for Federal or State office use)	TITLE	DECEIVEM
	TITLE	DATE
APPROVED BY	111.411	JUN 3 1976

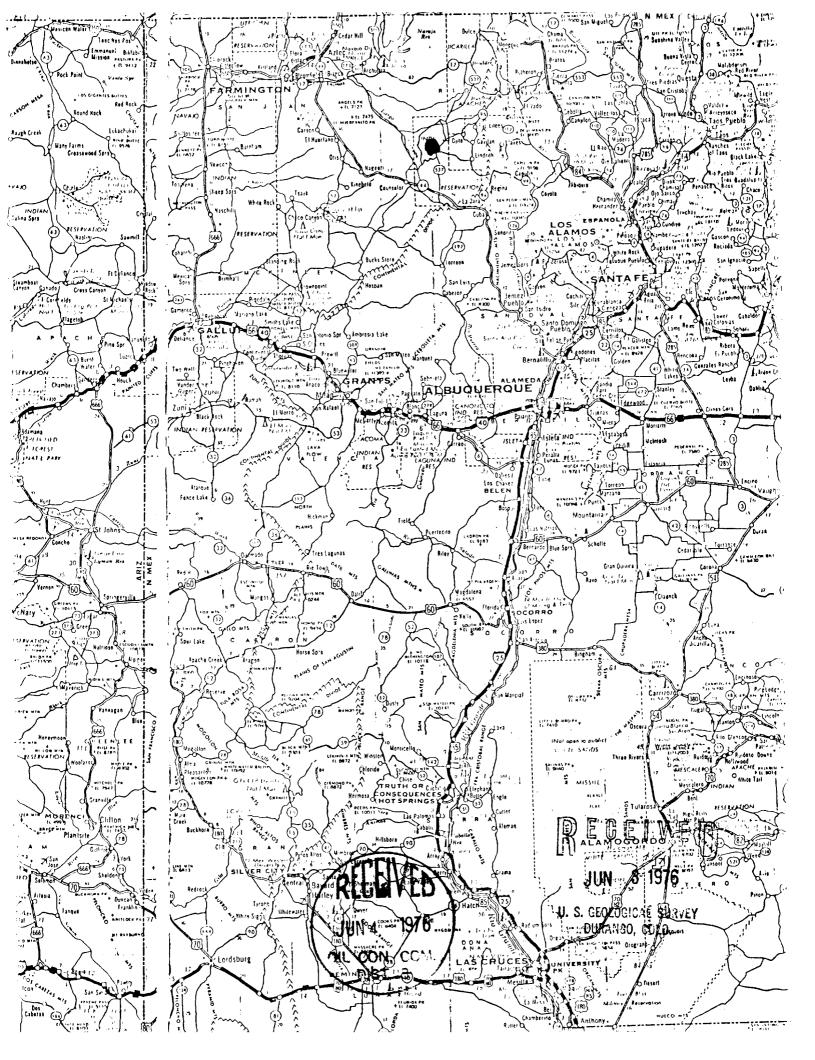
All distances must be from the outer boundaries of the Section.

Amerada Hess Corporation			Legse Jicarilla Apache				Well No. B -16
Init Letter	Section 29	Township Range County 24N 5W Rio Arriba			rriba		
Actual Foctage Loca 1850	feet from the Sour	th line and	1500		. Itom me	est	line
Ground Level Elev: 6595	Producing For	nation ota-Picatured Cl	iffs	Basin/Dakot Pict	a- ured Clif		dicated Acreage: see below Acres
2. If more the interest ar3. If more that	an one lease is ad royalty). un one lease of dommunitization, u		l, outlin dedicate ing. etc?	e each and ide	ntify the ow	nership there	lat below. eof (both as to working l owners been consoli-
this form i No allowal	f necessary.) ble will be assign	ed to the well until al	l interes	sts have been o	consolidated	(by commu	d. (Use reverse side of nitization, unitization, proved by the Commis-
		U . S	,	1976 CAL SURVEY _		I hereby cert tained herein best of my kr En. Gree Position Supervisor Company	r, Drlg. Adm. Serv.
1500 160 a		320 acres to E 100% unerada l)akota 		shown on thi notes of act under my sup is true and knowledge and Date Surveyed May 12	1976 Steps to not Engineer in the Community of the Commun









AMERADA HESS CORPORATION

J. Apache "B" #16

Sec. 29, T24N, R5W, Rio Arriba County, New Mexico

12 Point Surface Usage Plan

- 1. Location of well is approximately 20 miles West/Northwest of Lindrith, N.M. and estimated 12 miles to State Hiway 44. Attached maps will show existing lease roads in the area.
- 2. Attached are maps and profile USGS topographic/county road map showing proposed well location location and access lease road for the well and also a proposed 2000' road to be built off of lease road to well site.
- 3. Plat showing all existing locations within 1 mile radius of proposed well is attached.
- 4. No lateral road to other well locations is planned at this time.
- 5. No tank battery or flow lines are on location at this time but will be installed near well site if well is a producer.
- 6. Drilling water purposes will one from Largo Canyon water pit estimated 6 miles from location and we will haul water in by trucks.
- 7. A reserve pit of adequate size will be used to handle waste disposal and a trash pit for garbage and trash disposal.

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- 9. No camp or air strip will be constructed.
- 10. Plat showing rig layout plan is attached.
- ll. Restoration of the surface will include filling and levelling of all pits as soon as possible, grading and levelling of the location in same manner. The surface will be cleaned and reseeded according to instructions from the proper agency for adequacy.
- 12. Well site location is level and on a flat surface with natural gullies a short distance from location pad. No ditches or drainage canal will be cut for location drainage.

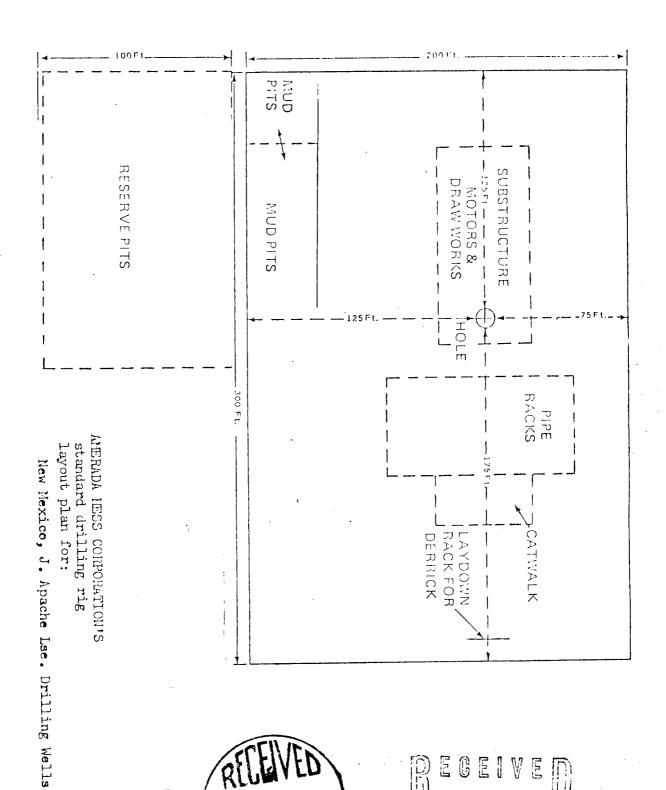


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U. S. GEOLOGICAL SURVEY DURANSO, COLO.

	
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	JICARILLA APACHE "B" No. 16
	BASIN DAKOTA & PICTURED CLIFF, APPROVED GAS WELL LOCATION.
	DASIN DAROTA & LICIURED CLIPP, ATTROCTO CONSTITUTE.
· · · · · · · · · · · · · · · · · · ·	LOC. SW/4, SEC. 29, TZ4N, RSW; RIO ARRIBA CO., N. MEX.
<u></u>	1750', 1750' FUL OF SEC. 29 State 1500' FUL & 1850' FSL
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	Ecopulary race
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<u> </u>	1250' 1750'
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المنطاب المستطار	IN THE PICTURED CLIEF SS.
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U. S. GEOLOGICAL SURVEY DURANGO, COLO.

AMERADA HESS CORPORATION

STANDARD PROCEDURES

FOR

BLOW OUT PREVENTION

AND CONTROL





JUN 3 1976

U. S. GEOLOGICAL SURVEY DURANGO, COLO.

EQUIPMENT

The following blow out prevention, monitoring, and control equipment is to be installed on all AHC operated drilling wells:*

- 1. Minimum of 2 ram type B.O.P.'s with pipe rams in lower preventor and blind rams in the upper preventor with a flow cross flanged between.

 A third B.O.P. should be required when operating with a tapered drill string. The B.O.P.'s should have at least the same pressure rating as the well head on which they are installed. The preventors are to be operated hydraulically by an adequate opening and closing system. Manual hand wheels with extensions are to be attached to the B.O.P.'s.
- 2. 1-bag type B.O.P., hydraulically operated as above, with an element in good condition, and to be of at least the same pressure rating as the type B.O.P.--up to 10,000 PSI.
- 3. B.C.P. manifold with hydraulic and manual inside valves and with two choke lines and one open line with proper block valves. All piping and valves to be of at least the same pressure rating as the B.O.P. stack.
- 4. Pit level monitoring device with at least one read out device at the driller's station.
- 5. Flow rate monitoring device with pump stroke counters connected to both pumps and with automatic trip fill up device with total read out device at the driller's station.

In addition to the equipment listed above, the following equipment is to be installed on any AHC operated drilling well that expects to drill an abnormally pressured zone, or is considered a wildcat

6. Hydraulically operated adjustable choke of at least the same rating as the manifold to which it is connected.

JUN 4 1976

DIST 3

- 7. Adequate mud gas atmospheric separator and mechanical degasser.
- 8. Automatic mud weighing device with chart read out recording at least the return mud weight.
- 9. Chart read out of the flow rate, and pit volume totalizer devices listed above.
- 10. At least a portable mud gas detector and shale density kit, or when conditions or expectations warrant—a complete mud logging unit is to be installed.
- 11. Adequate mixing facilities and storage for bulk barite materials.

*Items 1 through 5 maybe subject to some variations, as unusual conditions arise.



PRECAUTIONS

- 1. Properly rated and perfectly operating blow out preventors and control equipment are installed on the well.
- 2. At least the following cavices are installed and monitored: Pit volume totalizer, flow rate recorder, and trip fill up counter. In addition, pump strokes, pump pressure, mud weight, and bit weight are analyzed for unusual values. On some of the more complex wells, an adjustable choke, degasser, mud weighing device, mud logging unit and bulk barite facilities will also be installed and monitored.
- 3. Drilling breaks are checked for flow at 3 feet and 10 feet into the break. If the break is of considerable magnitude, it is circulated out, especially if drilling in the proximity of a transition zone.
- 4. Gas cut mud is considered as a warning, and its cause and extent examined to satisfaction.
- 5. The hole is filled each 5 stands while pulling out of the hole and pump strekes and pit level decrease are measured and compared against calculated displacement values.
- 6. Formation pore pressures and fracture pressures are calculated from electric logs and used to aid in proper casing seat selection and mud weight ranges.



PREPARATIONS

- 1. Maximum safe pressure values are calculated and made known for surface equipment and all casing strings, along with fracture pressure at deepest casing shoe or weakest exposed formation.
- 2. Conduct regularily scheduled (every 5 7 days or as conditions warrant, pressure tests of blow out preventers and control equipment to maximum working pressure with clear water. Check flange bolts for tightness.
- 3. Work blow out preventors, hydraulic valves, and adjustable choke every trip and pump through choke manifold every other trip.
- 4. Have choke lines tied into a stack (atmospheric) separator.
- 5. Establish who has the responsibility for detecting a kick and statting the well in. This should include checking fill up on trips and watching the hole while other operations are being conducted.
- 6. Establish who will do what during the killing operation and ergurin to all why each job is important to the success of killing the well.
- 7. Conduct surprise drills on kick detection and shut in procedure . . .
- 8. For maximum safety it is important that pipe rams be placed in the bottom ram type preventor so the well can be shut in if semething cust out in the upper section of the B.O.P. stack or if it is necessary to large rate.
- 9. Use clean hydraulic oil in the accumulator unit and check level weekly.
- 10. Each person who is to operate the hydraulic adjust the choke -2d be completely familiar with the mechanics and operation of the c -2d.
- 11. In order to provide necessary data for the killing operation. In presence of and 30 states of per minute. This data is also repeated if the mud weight is add during a tour.

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DETECTION

The importance of rapid kick detection and fast shut in cannot be overstressed. Kicks can be detected by the following indications, or combinations thereof:

- Increase in surface pit volume as detected by pit volume totalizer or a man on the pits.
- 2. Increase in return mud flow rate as detected by the flow rate monitor.
- 3. Decrease in drill pipe pressure, caused by oil, gas, or salt water entering the annulus and unbalancing the hole.
- 4. Gas or salt water cut mud returns caused by a kelly cut, shale gas, drilled pore volume, trip bottoms up, or drilling a high pressure-low volume formation.
- 5. Rate of penetration increase, especially if drilling in the proximity of an abnormally pressured zone.
- 6. Hole swabbing on trips as detected by the hole taking an insufficient amount of mud for the calculated pipe displacement, or the occurance of a high concentration of gas upon circulating bottoms up after a trip.



