SUBPART D - OIL AND GAS DRILLING OPERATIONS Updated July 28, 2016

PERMITS

D-500	DOES THE LESSEE HAVE WRITTEN APPROVAL BEFORE DRILLING, SIDETRACKING, BYPASSING, OR DEEPENING OPERATIONS BEGIN ON A WELL?				
	Authority: 30 CFR 250.410	Enforcement Actions: S			
D-504	DOES THE LESSEE HAVE WRITTEN OR ORAL APPROVAL TO RE MAKE CHANGES IN MAJOR DRILLING EQUIPMENT, OR PLUG B. Authority: 30 CFR 250.465(a)(1)				
DIVERTER REQUIREMENTS					
D-508	BEFORE DRILLING A CONDUCTOR OR SURFACE HOLE, IS THE DRILLING UNIT EQUIPPED WITH A DIVERTER SYSTEM CONSISTING OF A DIVERTER SEALING				
	ELEMENT, DIVERTER LINES, AND CONTROL SYSTEMS? Authority: 30 CFR 250.430	Enforcement Actions: S			
D-512	IS THE SPOOL OUTLET AND DIVERTER LINE NOMINAL DIAMETER AT LEAST 10 INCHES FOR SURFACE WELLHEAD CONFIGURATIONS AND AT LEAST 12 INCHES FOR FLOATING DRILLING OPERATIONS?				
	Authority: 30 CFR 250.431(a)	Enforcement Actions: S			
D-516	ARE BOTH OUTLETS PIPED TO PROVIDE DOWNWIND DIVERSIO SPOOL OUTLETS ARE UTILIZED?	N CAPABILITY, IF DUAL			
	Authority: 30 CFR 250.431(b)	Enforcement Actions: S			
D-520	IS THE DIVERTER SYSTEM EQUIPPED WITH FULL OPENING REVALVES IN THE FLOW AND VENT LINES THAT CAN BE OPERATE REMOTE CONTROL STATION AWAY FROM THE DRILL FLOOR IT ONE ON THE DRILL FLOOR?	ED FROM AT LEAST ONE			
	Authority: 30 CFR 250.431(c) 30 CFR 250.431(d)	Enforcement Actions: S			
D-524	ARE ALL RIGHT ANGLE AND SHARP TURNS IN THE DIVERTER I Authority: 30 CFR 250.431(e)	INES TARGETED? Enforcement Actions: S			
D-528	IS THE ENTIRE DIVERTER SYSTEM ANCHORED AND SUPPORTE WHIPPING AND VIBRATION AND IS ALL DIVERTER CONTROL IN PROTECTED FROM PHYSICAL DAMAGE FROM THROWN OR FAIL Authority: 30 CFR 250.431(f) 30 CFR 250.431(g)	NSTRUMENTS AND LINES			

IF FLEXIBLE HOSE IS USED FOR DIVERTER LINES, DOES IT HAVE INTEGRAL END D-532 **COUPLINGS?** Authority: 30 CFR 250.432(a) **Enforcement Actions: S** ARE BRANCH LINES INSTALLED TO PROVIDE DOWNWIND DIVERSION CAPABILITY, IF D-536 THE DIVERTER SYSTEM UTILIZES ONLY ONE SPOOL OUTLET? Authority: 30 CFR 250.432(b)(1) **Enforcement Actions: S** 30 CFR 250.432(b)(2) D-540 IF A SINGLE DIVERTER LINE IS IN USE ON A DYNAMICALLY POSITIONED FLOATING DRILLING RIG. IS THE VESSEL'S HEADING MAINTAINED TO ALLOW FOR DOWNWIND **DIVERSION?** Authority: 30 CFR 250.432(d) **Enforcement Actions: S** D-544 ARE THE DIVERTER SEALING ELEMENT, DIVERTER VALVES, AND DIVERTER CONTROL SYSTEMS, INCLUDING THE REMOTE CONTROL SYSTEM, ACTUATION TESTED AND THE VENT LINES FLOW TESTED WHEN INSTALLED? **Authority: 30 CFR 250.433 Enforcement Actions: W** D-548 ARE DIVERTER SEALING ELEMENTS AND DIVERTER VALVES PRESSURE TESTED TO A MINIMUM OF 200 PSI WHEN NIPPLED UP ON CONDUCTOR CASING, WITH NO MORE THAN 7 DAYS ELAPSED TIME BETWEEN SUBSEQUENT TESTS? Authority: 30 CFR 250.433(a) **Enforcement Actions: W/S** ARE ACTUATION TESTS OF THE DIVERTER SEALING ELEMENT, DIVERTER VALVES, D-552 AND DIVERTER CONTROL SYSTEMS, INCLUDING THE REMOTE CONTROL SYSTEM. CONDUCTED AT LEAST ONCE EVERY 24 HOURS FOR A SURFACE STACK OR ONCE EVERY 7 DAYS FOR A SUBSEA STACK; AND ARE THESE TEST BEING ALTERNATED BETWEEN CONTROL STATIONS? Authority: 30 CFR 250.433(a) **Enforcement Actions: W** 30 CFR 250.433(b) 30 CFR 250.433(c) ARE THE TIMES, DATES, AND RESULTS OF ALL DIVERTER PRESSURE TESTS. FLOW D-556 TESTS, AND ACTUATIONS RECORDED IN THE DRILLER'S REPORT AND IS EACH DIVERTER PRESSURE TEST RECORDED ON A PRESSURE CHART? **Authority: 30 CFR 250.433 Enforcement Actions: W/S** 30 CFR 250.434 HAS THE ONSITE REPRESENTATIVE CERTIFIED (SIGNED AND DATED) THE DIVERTER D-560 PRESSURE CHART AS CORRECT? **Authority: 30 CFR 250.434(b) Enforcement Actions: W** IS THE CONTROL STATION USED DURING THE DIVERTER PRESSURE TEST OR D-564 **ACTUATION IDENTIFIED? Authority: 30 CFR 250.434(c) Enforcement Actions: W** ARE PROBLEMS OR IRREGULARITIES OBSERVED DURING DIVERTER TESTING OR D-568 ACTUATION, AND THE REMEDIES TO CORRECT PROBLEMS, RECORDED IN THE DRILLER'S REPORT? Authority: 30 CFR 250.434(d) **Enforcement Actions: W**

- D-572 ARE PRESSURE CHARTS AND REPORTS PERTAINING TO THE DIVERTER TESTS AND ACTUATIONS RETAINED AT THE RIG FOR THE DURATION OF DRILLING THE WELL? Authority: 30 CFR 250.434(e) Enforcement Actions: W
- D-576 IF THE DIVERTER OR BOP IS NIPPLED DOWN DURING THE 8 OR 12 HOUR WAITING PERIOD FOR CEMENTING, HAS IT BEEN DETERMINED SAFE TO DO SO BEFORE NIPPLING DOWN?

Authority: 30 CFR 250.422(b) Enforcement Actions: W

CASING REQUIREMENTS

D-580	IS CASING SET AS APPROVED? Authority: 30 CFR 250.420	Enforcement Actions: W
D-584	DID THE OPERATOR ENSURE PROPER INSTALLATION OF THE SUBSEA WELLHEAD? Authority: 30 CFR 250.423(a) 30 CFR 250.423(b)	CASING OR LINER IN THE Enforcement Actions: W/S
D-588	DID THE OPERATOR PERFORM A PRESSURE TEST ON THE CAS ASSURE PROPER INSTALLATION OF THE INTERMEDIATE AND STRINGS OR LINER IN THE SUBSEA WELLHEAD OR LINER HAN Authority: 30 CFR 250.423(c)	PRODUCTION CASING
D-592	FOR EACH CASING STRING, IS THE MAXIMUM PRESSURE TO B THE BOP STACK CALCULATED AND POSTED NEAR THE DRILL Authority: 30 CFR 250.456(f)	
D-596	IF THE CASING SETTING DEPTHS ARE MORE THAN 100 FEET T APPROVED IN THE PERMIT, HAVE THE CHANGES BEEN CERTI ENGINEER AND HAVE THE CHANGES BEEN APPROVED BY THE Authority: 30 CFR 250.428(b)	FIED BY A PROFESSIONAL
D-600	IF A LINER IS USED AS AN INTERMEDIATE STRING BELOW A SPRODUCTION STRING BELOW AN INTERMEDIATE STRING, IS SET AT LEAST 100 FEET ABOVE THE PREVIOUS CASING SHOE? Authority: 30 CFR 250.421(f)	THE TOP OF THE LINER
D-604	FOR THE FINAL CASING STRING OR LINER, DID THE OPERATO MECHANICAL BARRIER, IN ADDITION TO CEMENT, TO PREVE OF FAILURE IN THE CEMENT; AND HAS THE INSTALLATION BY THE END OF OPERATIONS REPORT (EOR)? Authority: 30 CFR 250.420(b)(3) 30 CFR 250.141	NT FLOW IN THE EVENT

CEMENTING REQUIREMENTS

D-608	WERE CEMENTING JOBS DESIGNED AND CONDUCTED SO THAT CEMENT COMPOSITION, PLACEMENT TECHNIQUES, AND WAIT TIMES ENSURE THAT THE CEMENT PLACED BEHIND THE BOTTOM 500 FEET OF CASING ATTAINS A MINIMUM COMPRESSIVE STRENGTH OF 500 PSI BEFORE DRILLING OUT OF THE CASING OR			
	BEFORE COMMENCING COMPLETION OPERATIONS? Authority: 30 CFR 250.420(c)(1)	Enforcement Actions: W/S		
D-612	IF THE HOLE FOR THE DRIVE OR STRUCTURAL CASING WAS DRILLED, WAS THE QUANTITY OF CEMENT USED SUFFICIENT TO FILL THE ANNULAR SPACE BACK TO THE			
	MUD LINE? Authority: 30 CFR 250.421(a)	Enforcement Actions: W		
D-616	IS CEMENT FILL IN THE ANNULAR SPACE OF THE CONDUCTOR OBSERVING CEMENT RETURNS, OR IS AN ADDITIONAL QUANT ENSURE THE SPACE IS FILLED BACK TO THE MUD LINE?			
	Authority: 30 CFR 250.421(b)	Enforcement Actions: W/S		
D-620	IS THE SURFACE CASING CEMENTED WITH A QUANTITY OF CEMENT THAT I CALCULATED ANNULAR SPACE TO AT LEAST 200 FEET INSIDE THE CONDUC CASING (OR AS OTHERWISE APPROVED BY THE DISTRICT MANAGER)?			
	Authority: 30 CFR 250.421(c)	Enforcement Actions: W/S		
D-624	IS THE INTERMEDIATE CASING CEMENTED WITH AT LEAST A MINIMUM AMOUNT OF CEMENT TO FILL THE ANNULAR SPACE 500 FEET ABOVE THE CASING SHOE AND 500 FEET ABOVE EACH ZONE TO BE ISOLATED?			
	Authority: 30 CFR 250.421(d)	Enforcement Actions: W/S		
D-628				
	Authority: 30 CFR 250.421(e)	Enforcement Actions: W/S		
D-632	AFTER CEMENTING CASING (OR LINER), WAS THE CEMENT HELD UNDER PRESSURE FOR THE REQUIRED LENGTH OF TIME?			
	Authority: 30 CFR 250.422(a)	Enforcement Actions: W/S		
D-636	HAS A PRESSURE-INTEGRITY TEST BEEN RUN BELOW THE SURFACE CASING OR LINER, THE INTERMEDIATE CASING(S) OR LINER(S), OR AFTER DRILLING AT LEAST 10 FEET, BUT NO MORE THAN 50 FEET, OF NEW HOLE BELOW THE CASING SHOE?			
	Authority: 30 CFR 250.427	Enforcement Actions: W/S		
D-640	WERE REMEDIAL ACTIONS, APPROVED BY THE DISTRICT MAN WERE INDICATIONS OF AN INADEQUATE CEMENTING JOB? Authority: 30 CFR 250.428(c)	Enforcement Actions: W/S		
	30 CFR 250.428(d)			
D-644	WAS REMEDIAL ACTION TAKEN IF THE PRIMARY CEMENT JOB DID NOT ISOLATE ABNORMAL PRESSURE INTERVALS?			
	Authority: 30 CFR 250.428(e)	Enforcement Actions: W/S		

D-648 IS CEMENT THAT IS DESIGNED TO SET BEFORE IT FREEZES, AND HAS A LOW HEAT OF

HYDRATION, USED TO CEMENT ACROSS A PERMAFROST ZONE?

Authority: 30 CFR 250.428(i) Enforcement Actions: W/S

D-652 ARE ALL PORTIONS OF THE ANNULUS, OPPOSITE A PERMAFROST ZONE, PROTECTED

BY CEMENT FILLED WITH A LIQUID THAT HAS A FREEZING POINT BELOW THE

MINIMUM PERMAFROST TEMPERATURE TO PREVENT INTERNAL FREEZE-BACK AND IS

IT TREATED TO MINIMIZE CORROSION?

Authority: 30 CFR 250.428(j) Enforcement Actions: W/S

D-656 ARE THE RESULTS OF ALL TESTS AND HOLE-BEHAVIOR OBSERVATIONS MADE DURING

THE COURSE OF DRILLING, RELATED TO FORMATION INTEGRITY AND PORE

PRESSURE, RECORDED IN THE DAILY REPORT?

Authority: 30 CFR 250.427(a) Enforcement Actions: W

FLUID REQUIREMENTS

D-660	HAS DRILLING FLUID BEEN PROPERLY CONDITIONED, BY CIRCULATION, BEFORE STARTING OUT OF THE HOLE WITH DRILL PIPE OR IS THERE PROPER DOCUMENTATION IN THE DRILLER'S REPORT THAT SHOWS CIRCULATION WAS NOT NECESSARY? Authority: 30 CFR 250.456(a) Enforcement Actions: W
D-664	WHEN COMING OUT OF THE HOLE WITH DRILL PIPE, IS THE ANNULUS FILLED WITH DRILLING FLUID BEFORE THE CHANGE IN DRILLING FLUID DECREASES THE HYDROSTATIC PRESSURE BY 75 PSI, OR EVERY FIVE STANDS OF DRILL PIPE, WHICHEVER GIVES A LOWER DECREASE IN HYDROSTATIC PRESSURE; AND HAS THE NUMBER OF STANDS OF DRILL PIPE AND DRILL COLLARS THAT MAY BE PULLED PRIOR TO FILLING THE HOLE AND THE EQUIVALENT DRILLING FLUID VOLUME NEEDED TO FILL THE HOLE BEEN CALCULATED AND POSTED NEAR THE DRILLER'S STATION? Authority: 30 CFR 250.456(c) Enforcement Actions: W
D-667	IN AREAS WHERE PERMAFROST AND/OR HYDRATE ZONES MAY BE PRESENT, OR ARE KNOWN TO BE PRESENT, ARE DRILLING FLUID TEMPERATURES CONTROLLED? Authority: 30 CFR 250.456(j) Enforcement Actions: W
D-670	IS THE TEST FLUID IN THE HOLE CIRCULATED, REVERSE-CIRCULATED, OR HAS AN APPROPRIATE KILL WEIGHT FLUID BEEN BULLHEADED OUT OF THE DRILL STEM TEST TOOLS PRIOR TO PULLING THEM FROM THE HOLE; AND HAS IT BEEN RECORDED IN THE DRILLER'S REPORT? Authority: 30 CFR 250.456(b) Source (b) Enforcement Actions: W 30 CFR 250.456(h)
D-674	IS DRILLING FLUID TESTED IN ACCORDANCE WITH INDUSTRY ACCEPTED PRACTICES AND ARE DRILLING FLUID TESTS PERFORMED ONCE EACH TOUR, OR MORE FREQUENTLY IF CONDITIONS WARRANT; AND ARE THE RESULTS RECORDED IN THE DRILLER'S REPORT? Authority: 30 CFR 250.456(i) Enforcement Actions: W/S
D-678	ARE MINIMUM QUANTITIES OF DRILLING FLUID AND DRILLING FLUID MATERIALS, INCLUDING WEIGHT MATERIALS, MAINTAINED AT THE DRILL SITE AS NECESSARY TO ENSURE WELL CONTROL; AND IF NOT, ARE DRILLING OPERATIONS SUSPENDED? Authority: 30 CFR 250.418(b) Enforcement Actions: W/S 30 CFR 250.458(a) 30 CFR 250.458(c)
D-682	ARE RECORDS OF DAILY INVENTORIES OF DRILLING FLUID AND DRILLING FLUID MATERIALS MAINTAINED AT THE WELL SITE? Authority: 30 CFR 250.458(b) Enforcement Actions: W

OTHER DRILLING REQUIREMENTS

D-686 ARE DRILLING OPERATIONS SUSPENDED WHEN THE SAFE DRILLING MARGIN, AS

APPROVED IN THE PERMIT, IS NOT MAINTAINED?

Authority: 30 CFR 250.427(b) Enforcement Actions: W/S

30 CFR 250.250.414(c)

D-690 ARE INCLINATION SURVEYS OBTAINED ON ALL VERTICAL WELLS AT INTERVALS NOT

EXCEEDING 1,000 FEET DURING THE NORMAL COURSE OF DRILLING; AND ARE DIRECTIONAL SURVEYS GIVING BOTH INCLINATION AND AZIMUTH OBTAINED AT INTERVALS NOT EXCEEDING 500 FEET PRIOR TO OR UPON SETTING SURFACE OR

INTERMEDIATE CASING, LINERS, AND AT TOTAL DEPTH ON ALL WELLS?

Authority: 30 CFR 250.461(a)(1) Enforcement Actions: S

30 CFR 250.461(a)(2)

D-694 ARE DIRECTIONAL SURVEYS, GIVING BOTH INCLINATION AND AZIMUTH, OBTAINED ON ALL

DIRECTIONAL WELLS AT INTERVALS NOT EXCEEDING 500 FEET DURING THE NORMAL COURSE OF DRILLING: AND AT ALL INTERVALS NOT EXCEEDING 100 FEET IN ALL PORTIONS

OF THE HOLE WHEN ANGLE CHANGES ARE PLANNED?

Authority: 30 CFR 250.461(b) Enforcement Actions: S

SAFETY DEVICES AND EQUIPMENT

D-698	IS AN OPERABLE CROWN BLOCK SAFETY DEVICE INSTALLED TO PREVENT THE TRAVELING BLOCK FROM STRIKING THE CROWN BLOCK; AND HAS THE SAFETY DEVICE BEEN CHECKED FOR PROPER OPERATION AT LEAST ONCE A WEEK, AFTER EACH DRILL LINE SLIPPING OPERATION, AND ARE THE RESULTS RECORDED IN THE DRILLER'S REPORT?		
	Authority: 30 CFR 250.404	Enforcement Actions: S	
D-702	IS AN OPERATIONAL DRILLING FLUID-PIT LEVEL INDICATOR, WITH BOTH AND VISUAL WARNINGS, INSTALLED AND IN USE ON THE RIG FLOOR WHIL OPERATIONS ARE BEING CONDUCTED?		
	Authority: 30 CFR 250.457(a)	Enforcement Actions: S	
D-706	IS A MECHANICAL, VOLUMETRIC, OR ELECTRONIC DEVICE THE AMOUNT OF DRILLING FLUID REQUIRED TO FILL THE I Authority: 30 CFR 250.457(b)		
D-710	ARE DRILLING FLUID RETURN INDICATOR DEVICES, WHICH RELATIONSHIP BETWEEN DRILLING FLUID RETURN FLOW F DISCHARGE RATE, INSTALLED WITH VISUAL AND AUDIBLE Authority: 30 CFR 250.457(c)	RATE AND PUMP	
D-714	ARE ALL CLASSIFIED DRILLING FLUID-HANDLING AREAS ECCAPACITY MECHANICAL VENTILATION SYSTEMS, UNLESS S PROVIDED BY NATURAL MEANS?	UCH VENTILATION IS	
	Authority: 30 CFR 250.459(a)(1)	Enforcement Actions: S	
D-721	IF NOT CONTINUOUSLY ACTIVATED, ARE MECHANICAL VEN ACTIVATED UPON RECEIVING A SIGNAL FROM THE GAS DET OPERATIONAL AT ALL TIMES, WHEN THE PRESENCE OF 1 PI COMBUSTIBLE GAS BY VOLUME IS INDICATED?	CEIVING A SIGNAL FROM THE GAS DETECTORS, WHICH SHALL BE L TIMES, WHEN THE PRESENCE OF 1 PERCENT OR MORE OF	
	Authority: 30 CFR 250.459(a)(2)	Enforcement Actions: S	
D-724	IF DISCHARGES FROM A MECHANICAL VENTILATION SYSTE ARE ALL CLASSIFIED DRILLING FLUID-HANDLING AREAS M PRESSURE?		
	Authority: 30 CFR 250.459(a)(3)	Enforcement Actions: S	
D-728	ARE ALL CLASSIFIED DRILLING FLUID-HANDLING AREAS, WHICH ARE MAINTAIN A NEGATIVE PRESSURE, PROTECTED WITH AT LEAST ONE OF THE FOLLOWING: PRESSURE- SENSITIVE ALARM, (II) OPEN-DOOR ALARMS ON EACH ACCESS TO THE AREA, (III) AUTOMATIC DOOR-CLOSING DEVICES, (IV) AIR LOCKS, OR (V) OTHER DEVICES APPROVED BY THE DISTRICT MANAGER?		
	Authority: 30 CFR 250.459(a)(3)	Enforcement Actions: S	
D-732	ARE ALL CLASSIFIED DRILLING FLUID-HANDLING AREAS FI DETECTORS AND ALARMS, EXCEPT IN OPEN AREAS WHERE IS PROVIDED BY NATURAL MEANS, AND ARE GAS DETECTOR TESTED AT LEAST EVERY 90 DAYS?	ADEQUATE VENTILATION	
	Authority: 30 CFR 250.459(b)	Enforcement Actions: S	

D-736 IS OPERABLE GAS DETECTING EQUIPMENT INSTALLED TO MONITOR DRILLING FLUID RETURNS. WITH THE REQUIRED TYPE OF INDICATORS LOCATED ON THE RIG FLOOR OR IN A CONTINUOUSLY MANNED DRILLING FLUID LOGGING UNIT HAVING IMMEDIATE COMMUNICATION WITH THE RIG FLOOR? Authority: 30 CFR 250.457(d) **Enforcement Actions: S** D-740 ARE ALL CLASSIFIED DRILLING FLUID-HANDLING AREAS EQUIPPED WITH EITHER EXPLOSION-PROOF OR PRESSURIZED ELECTRICAL EQUIPMENT TO PREVENT THE **IGNITION OF EXPLOSIVE GASES?** Authority: 30 CFR 250.459(c) **Enforcement Actions: S** D-744 WHERE AIR IS USED FOR PRESSURIZING EOUIPMENT, IS THE AIR INTAKE LOCATED OUTSIDE OF, AND AS FAR AS PRACTICABLE, FROM HAZARDOUS AREAS? Authority: 30 CFR 250.459(c) **Enforcement Actions: S** D-748 ARE MECHANICAL VENTILATION SYSTEMS FITTED WITH ALARMS, WHICH ARE ACTIVATED UPON A FAILURE OF THE SYSTEM? Authority: 30 CFR 250.459(d) **Enforcement Actions: S** IS AN OPERABLE DRILLING FLUID-GAS SEPARATOR AND OPERABLE DEGASSER D-752 INSTALLED PRIOR TO COMMENCEMENT OF DRILLING OPERATIONS AND MAINTAINED THROUGHOUT THE DRILLING OF THE WELL? Authority: 30 CFR 250.456(g) **Enforcement Actions: S** D-756 IS THE DISTRICT MANAGER GIVEN AT LEAST 24 HOURS NOTICE BEFORE STARTING A WELL TEST? **Authority: 30 CFR 250.460(b) Enforcement Actions: W**