SPR

PA NUMBER 701604
SITE EFFECTIVITY 55
ROM

PAB SUMMARY

TITLE - Establish Saint James Set Point Baseline

TYPE
☒ PAL ☐ AUD ☐ MR ☒ ECR ☐ PR ☐ TIPS ☐ PACR ☐ SAC

SPONSOR (NAME/ORG/PHONE)	PRIORITY / RANK	URGENCY	FUNDING CATEGORY	FUNDING SOURCE	DISPOSITION	DATE
S. Caldarera	RANK 01	☐ EMERGENCY ☐ URGENT ☒ ROUTINE		LOE	☐ APPROVED ☐ DISAPPROVED ☐ CANCELLED	

ENGINEERING CHANGES ONLY

CLASS I	CLASS II	CHANGE CATEGORY	
☒ CONCUR	☐ APPROVED	☐ SAFETY, FP, ENVIRON.	☒ OPERATONS
☐ NONCONCUR	☐ DISAPPROVED	☐ SECURITY	☐ RAM
	☒ CANCELLED	☐ DRAWDOWN	☐ COST REDUCTION

PAB SIGNATURES	CONCUR	NON CONCUR	DATE	COMMENTS
CHAIRPERSON				
FINANCE & ADMINISTRATION HUMAN RESOURCES				
PROCUREMENT & PROPERTY SELF ASSESSMENT, INTERNAL AUDIT, LEGAL				
INTEGRATED PROJECT PLANNING & CONTROL CONTINUOUS QUALITY IMPROVEMENT NOLA/SUPPORT SERVICES J. Olivier	✓		10/18/95	
ENVIRONMENTAL, SAFETY & HEALTH QUALITY ASSURANCE	✓		10/18/95	
ENGINEERING & CONSTRUCTION	✓		10/18/95	
OPERATIONS & MAINTENANCE	✓		10/18/95	

COMMENTS (TRB CONCERNS, HATS, OSHA, AUDITS, ETC.)

- TRB Concur
- DOE SSR Request

ANSWERED BY PAB REPRESENTATIVE OR SPONSOR	YES	NO
1. VALUE ENGINEERING TECHNIQUES WERE USED?		
2. A LIFE CYCLE COST ANALYSIS AND COST/BENEFIT ANALYSIS WAS PERFORMED FOR PROJECTS WITH ROM COST EQUAL TO OR GREATER THAN $50,000?		
3. AVAILABLE ALTERNATIVES WERE THOROUGHLY DISCUSSED?		
4. THE IMPACT TO DRAWDOWN–CRITICAL SYSTEMS AND SUBSYSTEMS WAS COMPLETELY ANALYZED?		
5. THE IMPACT ON OPERATIONS PROCESS CONTROL SYSTEMS IS COMPLETELY DOCUMENTED?		
6. IS THERE A DEFINITE NEED OR REQUIREMENT FOR THE PROPOSED TASK (E.G. DM CONTRACT DELIVERABLE, DOE ORDER, SPR DESIGN CRITERIA, OSHA REGULATION, ETC.)?		
7. SHOULD THIS TASK BE APPLIED SPR–WIDE FOR STANDARDIZATION OF FACILITIES?		

ANSWERED BY PAB REPRESENTATIVE OR SPONSOR

8. WHEN WAS THIS TASK FIRST IDENTIFIED? _____
9. HOW LONG HAS THERE BEEN A REQUIREMENT FOR THE TASK? _____
10. WHAT IS THE ORIGINATING SOURCE? _____
11. WHAT IS THE IMPACT TO THE SPR IF THIS TASK IS/IS NOT DONE? (E.G. IMPACT TO PERSONNEL SAFETY, EQUIPMENT RELIABILITY, THE ENVIRONMENT, ETC.) _____
12. WHAT IS THE IMPACT TO DRAWDOWN? _____

PAL FILE UPDATED BY _____ DATE OCT 20 1995 | VERIFIED BY _____ DATE _____

OSF90-0003 1/90 REV. 6/93

Cstat 10/30/95

SPR

TRB SUMMARY

SITE(S) AFFECTED	
SJ	
PAN/ECR# 70604	REV. #

TITLE	ESTABLISH SAINT JAMES SET POINT BASELINE			
	CONCUR	NON CONCUR	DATE	COMMENTS
SITE ENGINEER				
SITE MANAGER				
ES&H	✓		7/18/95	
PROJECT MANAGEMENT				
SECURITY				
CAVERN/MINE ENGINEERING				
IPP&C				
OPERATIONS/MAINTENANCE	✓		7/18/95	
FIRE PROTECTION				
ENGINEERING DESIGN	✓		7/18/95	
QUALITY ASSURANCE				
OTHER'S				
OPERATIONAL ENGINEERING				
ORGANIZATION/SIGNATURE				
ORGANIZATION/SIGNATURE				
ORGANIZATION/SIGNATURE				

☒ CLASS I ☐ CLASS II	TRB CHAIRMAN	DATE	RANK
☒ CONCUR ☐ NONCONCUR	H. K. Hughes	7/18/95	07
☐ CANCELLED			

TRB CHAIRMAN'S COMMENTS

SPR

TRB SUMMARY

SITE(S) AFFECTED	
SJ	
PAN/ECR# 70604	REV. #

TITLE ESTABLISH SAINT JAMES SET POINT BASELINE				
	CONCUR	NON CONCUR	DATE	COMMENTS
SITE ENGINEER Barry Busch	✓		9/11/95	
SITE MANAGER	✓			
ES	✓		7/18/95	
PROJECT MANAGEMENT				
SECURITY				
CAVERN/MINE ENGINEERING				
IPP&C				
OPERATIONS/MAINTENANCE	✓		7/18/95	
FIRE PROTECTION				
ENGINEERING DESIGN	✓		7/18/95	
QUALITY ASSURANCE				
OTHER'S				
OPERATIONAL ENGINEERING				
ORGANIZATION/SIGNATURE				
ORGANIZATION/SIGNATURE				
ORGANIZATION/SIGNATURE				

☒ CLASS I ☐ CLASS II	TRB CHAIRMAN	DATE	RANK
☒ CONCUR ☐ NONCONCUR ☐ CANCELLED	H K Hughes	7/18/95	

TRB CHAIRMAN'S COMMENTS

70604

WR-91-230

Strategic Petroleum Reserve

ENGINEERING CHANGE PROPOSAL

SUMMARY SHEET

CLASS I CHANGE

ECP NUMBER	ECP TITLE
SJ-M/O-4596	Establish Saint James Set Point Baseline

BUDGET SOURCE

- ☐ SPR BLI _____
- ☐ CONTRACTOR BASELINE
- ☐ BCR
- ☒ OTHER LOE

AUTHORITY

- ■ PCCB
- ☐ ECC

SCHEDULE

- ☐ YES
  - MILESTONE NUMBER _____
  - CMCR NUMBER _____
- ☒ NO

TOTAL ESTIMATED COST OF CHANGE

	FY 96	FY	FY
DESIGN	____	____	____
CONSTRUCTION	____	____	____
TOTAL	LOE	____	____

PCCB/ECC SIGNATURES	DISPOSITION: CONCUR	DISPOSITION: NON CONCUR	DISPOSITION: DATE	COMMENTS CONDITIONS/LIMITATIONS
DOE SENIOR SITE OFFICIAL	X		No Date	See Attached FAX
APM TECHNICAL ASSURANCE	X		11/21/95	
APM SYSTEMS AND PROJECTS	✓		11/21/95	
APM MAINTENANCE AND OPERATIONS	✓		11/21/95	Based on My Culbert recommend
DEPUTY PROJECT MANAGER				
DOE CMO				
PROJECT MANAGER				
DEPUTY ASSISTANT SECRETARY - SPR				

PCCB/ECC ACTION

- ☒ FULL APPROVAL
- ☐ CONDITIONAL/LIMITED APPROVAL
- ☐ DISAPPROVED

WR-91-230

STRATEGIC PETROLEUM RESERVE
ENGINEERING CHANGE PROPOSAL

ECP NUMBER	ECP TITLE	PAGE 1 OF 3
SJ-mlo-4596	Establish Saint James Set Point Baseline	

CONTRACTOR CHANGE NO./REV.	INITIATED BY	DATE:	SUBMITTED BY	DATE
70604	S. Caldarera	5/2/95	G.K. Hughes	5/2/95
PRIORITY	**ORG./CONTRACTOR**	**PHONE NO.**	**ORG./CONTRACTOR**	**PHONE NO.**
☐ EMERGENCY	10420/DM	4719	10420/DM	4295
☐ URGENT				
■ ROUTINE				

VALUE ENGINEERING	DRAWDOWN CRITICAL	ROM ESTIMATE
☐ VEP (MANDATORY)	☐ YES	$ -LOE-
☐ VECP (VOLUNTARY)	☐ NO	

DESCRIPTION
PROBLEM / EXISTING CONFIGURATION:

Presently there is no single document that contains a comprehensive listing of setpoints at Saint james. Setpoints are currently found in various documents, (eg. Instrument Index, Maintenance Equipment Index, various ECR's).

PROPOSED SOLUTION/ENHANCEMENT

The attached is a comprehensive table of setpoints for the Saint James site.This document establishes these setpoints as the baseline.

Note: Any proposed changes to this baseline must be made via an approved ECP.

REASON/JUSTIFICATION

To ensure that existing setpoints are accurately listed and can be found in one document, which will facilitate any future setpoint reviews.

CI'S AFFECTED

Fisher-Rosemount DCS, SOTO w/New Fisher-Rosemount DCS

TECHNICAL ANALYSIS/RECOMMENDATION

AGREE w/ Proposed Change

IMPLEMENTATION METHOD
- ☐ SUBCONTRACT
- ☐ M&O LABOR (LOE)
- ☐ COMBINATION

ENGINEERING	DATE	DOE SSR	DATE	
G.K. Hughes	7/18/95	See Attached ESD		☑ CONCUR ☐ NONCONCUR

WR-91-230

STRATEGIC PETROLEUM RESERVE
ENGINEERING CHANGE PROPOSAL

ECP NUMBER	ECP TITLE	PAGE 1 OF 3
SJ-m6-4596	Establish Saint James Set Point Baseline	

CONTRACTOR CHANGE NO./REV.	INITIATED BY	DATE:	SUBMITTED BY	DATE
70604	S. Caldarera	5/2/95	G.K. Hughes	5/2/95
	ORG./CONTRACTOR	PHONE NO.	ORG./CONTRACTOR	PHONE NO.
	10420/DM	4719	10420/DM	4295

PRIORITY

- ☐ EMERGENCY
- ☐ URGENT
- ■ ROUTINE

VALUE ENGINEERING	DRAWDOWN CRITICAL	ROM ESTIMATE
☐ VEP (MANDATORY)	☐ YES	$ _____
☐ VECP (VOLUNTARY)	☐ NO	

DESCRIPTION

PROBLEM / EXISTING CONFIGURATION:

Presently there is no single document that contains a comprehensive listing of setpoints at Saint James. Setpoints are currently found in various documents, (eg. Instrument Index, Maintenance Equipment Index, various ECR's).

PROPOSED SOLUTION/ENHANCEMENT

The attached is a comprehensive table of setpoints for the Saint James site.This document establishes these setpoints as the baseline.

Note: Any proposed changes to this baseline must be made via an approved ECP.

REASON/JUSTIFICATION

To ensure that existing setpoints are accurately listed and can be found in one document, which will facilitate any future setpoint reviews.

CI'S AFFECTED

Fisher-Rosemount DCS, SOTS w/New Fisher-Rosemount DCS

TECHNICAL ANALYSIS/RECOMMENDATION

AGREE w/ Proposed Change

IMPLEMENTATION METHOD

- ☐ SUBCONTRACT
- ☐ M&O LABOR (LOE)
- ☐ COMBINATION

ENGINEERING	DATE	DOE SSR	DATE	
G.K. Hughes	7/18/95	[signature]	[signature]	☒ CONCUR ☐ NONCONCUR

STRATEGIC PETROLEUM RESERVE

ENGINEERING CHANGE PROPOSAL

SOFTWARE, HARDWARE, FIRMWARE CHANGE

CONTRACTOR CHANGE NUMBER	REVISION NUMBER	ECP NUMBER	PAGE
70604			3 OF 3

SOFTWARE CHANGE ANALYSIS

Software Engineering does not have the documentation needed to verify the accuracy of the existing software setpoints for St. James.

HARDWARE/SOFTWARE AFFECTED

(NOTE: REDLINE CI BOM)

DISPOSITION OF PARTS

❑ REWORK SITE COMPONENTS ONLY ❑ REWORK ALL SITE COMPONENTS ❑ COMPONENTS NOT AFFECTED

❑ OTHER (DESCRIBE) _____

COMPONENT COMPATIBILITY (LIST COMPONENTS SEPARATELY IF COMPATIBILITIES ARE DIFFERENT)

❑ INTERCHANGEABLE ❑ DRAWDOWN COMPATIBLE ❑ NONCOMPATIBLE

OPCS SUPPORT ENGINEER	DATE	FUNCTIONAL MANAGER	DATE
		Deborah Dozier	11/1/95

IMPLEMENTATION / TEST COMMENTS

WITNESSED BY	DATE

TEST APPROVED BY	DATE	CHANGE RELEASED AUTHORITY	DATE

STRATEGIC PETROLEUM RESERVE
ENGINEERING CHANGE PROPOSAL
CONFIGURATION CHANGE AFFECED REPORT

WR-91-230

TO BE COMPLETED BY TECHNICAL REVIEW PROCESSS, ENGINEERING AND CONFIGURATION MANAGEMENT ORGANIZATION DEFINED PROCESS

ECP NO.	CONTRACTOR CHANGE NO.	REV.	CHANGE CLASSIFICATION
SJ-m/0-4596	70604		■ CLASS I ☐ CLASS II

FUNCTIONS AFFECTED

Y	N	ITEM
	X	LEVEL I ☐ II ☐ III ☐ CRITERIA
	X	PERFORMANCE CRITERIA
	X	RAM
	X	INTERFACE CHARACTERISTICS
	X	I/O POINTS
	X	DOE LEVEL I, II, III SCHEDULES
	X	GUARANTEES/DELIVERABLES
	X	SAFETY/ENV/FP (CIRCLE ONE)
	X	SECURITY REQUIREMENTS
X		OPCS SOFTWARE
	X	OPCS HARDWARE
	X	OPCS FIRMWARE
X		SET POINTS/RANGES
	X	DIP SWITCH SETTINGS/JUMPERS
	X	MASTER CI LIST
	X	WELLHEAD CONFIGURATION
	X	SPARES/PROVISIONING REQUIREMENTS
	X	GOVERNMENT FURNISHED EQUIPMENT
	X	ENERGY USAGE
	X	VALUE ENG. (COST SAVINGS)
	X	OPERATIONS MODELS
	X	OTHER

DOCUMENTS AFFECTED

Y	N	ITEMS
		PIPING
	X	101 - PROCESS FLOW DIAGRAMS
	X	102 - MECHANICAL FLOW DIAGRAMS
X		103 - PIPING AND INSTRUMENTATION DIAGRAMS (P&ID'S)
	X	104 - UTILITY FLOW DIAGRAMS
	X	105 - GENERAL PIPING PLANS
	X	106 - AREA PLANS (MECHANICAL EQUIPMENT LOCATION)
	X	122 - WELL HEAD DRAWINGS
	X	130 - VALVE LIST
	X	135 - LINE LIST
	X	140 - PSV LIST
	X	150 - STANDARDS
		CIVIL/STRUCTURAL
	X	201 - PLOT PLANS
	X	202 - SITE WORK: GRADING (ROUGH & FINISH) DRAINAGE FENCING, ETC.
	X	210 - FOUNDATIONS: LOCATION PLANS
	X	216 - MINES (WEEKS ISLAND ONLY)
	X	250 - STANDARDS
		ELECTRICAL
	X	301 - AREA CLASSIFICATION
	X	302 - ONE LINE DIAGRAMS
	X	303 - SCHEMATIC DIAGRAMS
	X	304 - POWER PLANS AND DETAILS
	X	305 - LIGHTING PLANS AND DETAILS
	X	307 - SUBSTATION PLANS AND DETAILS
	X	308 - WIRING DIAGRAMS
	X	310 - GROUNDING
	X	311 - CONDUIT & CABLE SCHEDULES (INCLUDING INSTRUMENTS)
	X	313 - MCC/SWITCH GEAR EVALUATION & SCHEDULE

DOCUMENTS AFFECTED

Y	N	ITEM
		ELECTRICAL (cont'd)
	X	315 - CATHODIC PROTECTION
	X	350 - STANDARDS
		INSTRUMENTATION
	X	401 - BLOCK DIAGRAM
X		402 - LOOP DIAGRAMS
	X	403 - INSTRUMENT PLANS
	X	404 - INSTRUMENT WIRING DIAGRAM
X		409 - INSTRUMENT INDEX
	X	450 - STANDARDS
		MAPPING
	X	501 - ALIGNMENT SHEETS
	X	509 - PIPELINE DRWGS (MAINLINE VALVES, DRIPS, SCRAPER, TRAPS, ETC.
	X	550 - STANDARDS
		ARCHITECTUAL
	X	720 - ELEVATIONS AND FLOOR PLANS
	X	750 - STANDARDS
		DOCUMENTATION
	X	900 - RESERVED
	X	901 - TECHNICAL/PERFORMANCE/DESIGN CRITERIA
X	~~X~~	910 - DESIGN DESCRIPTION/BASIS
X		911 - PROCESS SET POINT DOCUMENTS
	X	912 - EQUIPMENT LIST
	X	913 - MOV LIST
	X	915 - ELECTRICAL SAFETY
	X	920 - I/O DOCUMENT
X		930 - OPERATIONS AND MAINTENANCE MANUALS
	X	950 - STANDARD SPECIFICATIONS
	X	970 - TASK SPECIFICATIONS
	X	990 - CONFIGURATION MANAGEMENT REPORTS/I.B.M.

COMMENTS

ENGINEEING [signature] DATE 5/2/95

CONFIGURATION MANAGEMENT [signature] DATE 5/3/95

A-178

[initials] 5/5/95

ELN	ELN ON P&ID	DEVICE	LOCATION	SERVICE	DATEC LIST SETPOINT	DATEC LIST RANGE	BASELINE SETPOINT	BASELINE RANGE	UNITS	COMMENTS
FSH/A	FSH 2034A	Flow Switch, High	Bayou Choctaw Header Surge Relief Valve	CO						need setpoint
FSH/A	FSH 2034B	Flow Switch, High	Bayou Choctaw Header Surge Relief Valve	CO						need setpoint
BCDR1		Density Recorder	BC Control Valve BC120C	CO		20-60		20-60	deg API	
BCDT1		Density Transmitter	BC Control Valve BC120C	CO		60-20		60-20	deg API	
BCDPA1	BCPDAH1	Differential Pressure Alarm	BC Meter Run 1	CO						needs range/setpoint
BCDPIS1	BCPDIS1	Differential Pressure Switch	BC Meter Run 1	CO						needs range/setpoint
BCFA1		Flow Alarm	BC Meter Run 1	CO						needs setpoint
BCFIC1		Flow Controller	BC Meter Run 1	CO						needs range
BCFQI1	BCFE/FT/FQ1	Flow Transmitter	BC Meter Run 1	CO						need range
PT	PT 2476	Pressure Transmitter	BC Meter Run 1	CO						need range
BCTE1	BCTT1	Temperature Element	BC Meter Run 1	CO						need range
BCTI1		Temperature Indicator	BC Meter Run 1	CO						need range
BCDPA2	BCPDAH2	Differential Pressure Alarm	BC Meter Run 2	CO						needs range/setpoint
BCDPIS2	BCPDIS2	Differential Pressure Switch	BC Meter Run 2	CO						needs range/setpoint
BCFA2		Flow Alarm	BC Meter Run 2	CO						needs setpoint
BCFIC2		Flow Controller	BC Meter Run 2	CO						needs range
BCFQI2	BCFE/FT/FQ2	Flow Transmitter	BC Meter Run 2	CO						need range
PT	PT 2477	Pressure Transmitter	BC Meter Run 2	CO						need range
BCTE2	BCTT2	Temperature Element	BC Meter Run 2	CO						need range
BCTI2		Temperature Indicator	BC Meter Run 2	CO						need range
BCDPA3	BCPDAH3	Differential Pressure Alarm	BC Meter Run 3	CO						needs range/setpoint
BCDPIS3	BCPDIS3	Differential Pressure Switch	BC Meter Run 3	CO						needs range/setpoint
BCFA3		Flow Alarm	BC Meter Run 3	CO						needs setpoint
BCFIC3		Flow Controller	BC Meter Run 3	CO						needs range
BCFQI3	BCFE/FT/FQ3	Flow Transmitter	BC Meter Run 3	CO						need range
PT	PT 2478	Pressure Transmitter	BC Meter Run 3	CO						need range
BCTE3	BCTT3	Temperature Element	BC Meter Run 3	CO						need range
BCTI3		Temperature Indicator	BC Meter Run 3	CO						need range
BCPR1A		Pressure Recorder	BC Meter Skid Inlet	CO		0-200		0-200	PSIG	
BCPT1A		Pressure Transmitter	BC Meter Skid Inlet	CO		0-100,0-1000		0-200	PSIG	
PT	PT/PR 2003	Pressure Transmitter	BC Pig Trap Inlet	CO						need range
FSH/A	FSH 2033A	Flow Switch, High	Capline Header Surge Relief Valve	CO						need setpoint
FSH/A	FSH 2033B	Flow Switch, High	Capline Header Surge Relief Valve	CO						need setpoint
PR200135		Pressure Recorder	Control Room, 3-Pen Recorder							not found on p&id
BCPR1DR1		Press/Density Recorder	Crude Oil Pressure and Density to/from Bayou Choctaw	CO				0-200	PSIG	may be same as DR & PR on p&id 018
WIPR1DR1		Press/Density Recorder	Crude Oil Pressure and Density to/from Weeks Island	CO				0-200	PSIG	may be same as the DR & PR on p&id 018
BCPIC1		Pressure Controller	Crude Oil Pressure to/from Bayou Choctaw	CO		0-200		0-200	PSIG	
BCPR1		Pressure Recorder	Crude Oil Pressure to/from Bayou Choctaw	CO		0-200		0-200	PSIG	
BCPT1		Pressure Transmitter	Crude Oil Pressure to/from Bayou Choctaw	CO		0-100,0-1000		0-200	PSIG	
CECO3012		Pressure Recorder	Crude Oil Pressure to/from Bayou Choctaw Metering	CO						not found on p&id
D1PIC1		Pressure Controller	Crude Oil Pressure to/from Dock 1	CO				0-200	PSIG	
D1PR1		Pressure Recorder	Crude Oil Pressure to/from Dock 1	CO		0-200		0-200	PSIG	
D1PT1		Pressure Transmitter	Crude Oil Pressure to/from Dock 1	CO		0-100,0-1000		0-200	PSIG	

ELN	ELN ON P&ID	DEVICE	LOCATION	SERVICE	DATEC LIST SETPOINT	DATEC LIST RANGE	BASELINE SETPOINT	BASELINE RANGE	UNITS	COMMENTS
D2PIC1		Pressure Controller	Crude Oil Pressure to/from Dock 2	CO		0-200		0-200	PSIG	
D2PR1		Pressure Recorder	Crude Oil Pressure to/from Dock 2	CO		0-200		0-200	PSIG	
D2PT1		Pressure Transmitter	Crude Oil Pressure to/from Dock 2	CO		0-100,0-1000		0-200	PSIG	
FSH/A	FSH 2035A	Flow Switch, High	Discharge Header 1 Surge Relief Valve	CO						need setpoint
FSH/A	FSH 2035B	Flow Switch, High	Discharge Header 1 Surge Relief Valve	CO						need setpoint
D1PT2	D1PT 102	Pressure Transmitter	Dock 1 Header to/from Terminal	CO						need range
D1D2SGR2	SGR 101	Spec Gravity Recorder	Dock 1 Header to/from Terminal	CO		60-20		60-20	API	
D1SGT2	SGT 101	Spec Gravity Transmitter	Dock 1 Header to/from Terminal	CO						need range
D1TR2	TR 101	Temperature Recorder	Dock 1 Header to/from Terminal	CO						need range
D1TT2	D1TT 102	Temperature Transmitter	Dock 1 Header to/from Terminal	CO						need range
D2PT2		Pressure Transmitter	Dock 2 Header to/from Terminal	CO						need range,
	SGR 201	Spec Gravity Recorder	Dock 2 Header to/from Terminal	CO						need range
D2SGT2	SGT 201	Spec Gravity Transmitter	Dock 2 Header to/from Terminal	CO						need range
D2TR2	TR 201	Temperature Recorder	Dock 2 Header to/from Terminal	CO						need range
D2TT2		Temperature Transmitter	Dock 2 Header to/from Terminal	CO						need range
D1D2PR1		Pressure Recorder	Docks #1 and #2 - Surge Pressure	CO						the list and p&id shows a D1PR1 and D2PR1
WILAH2	LAH2	Level Alarm, H	Effluent Sump SJT-S6	WW						need setpoint
WTLS2		Level Switch	Effluent Sump SJT-S6	WW						need setpoint
LSL	LSL 2426	Level Switch, L	Firewater Tank V3, Low Level	FP						need setpoint
LSLL	LSLL 2429	Level Switch, LL	Firewater Tank V3, Low Low Level	FP						need setpoint
	LAHH 2351	Level Alarm	Foam Pond #1 Level Alarm							need setpoint
LS	LSH/L 2351	Level Switch	Foam Pond #1 Level Switch							need setpoint
	LAHH 2355	Level Alarm	Foam Pond #2 Level Alarm							need setpoint
LS	LSH/L 2355	Level Switch	Foam Pond #2 Level Switch							need setpoint
BCFDPI1		Differential Pressure Indicator	Foam Prop #1	FP						need setpoint
BCFDPI2		Differential Pressure Indicator	Foam Prop #1	FP						not found on p&id, need range
WIFDPI1		Differential Pressure Indicator	Foam Prop #1	FP						not found on p&id, need range
WIFDPI2		Differential Pressure Indicator	Foam Prop #1	FP						not found on p&id, need range
WILAH4	LAH4	Level Alarm, H	Lift Station Sump SJT-S1	OW						not found on p&id, need range
WTLS4		Level Switch	Lift Station Sump SJT-S1	OW						need setpoint
BCWIPR1		Pressure Recorder	Meter Prover	CO						need setpoint
BCWIPT1		Pressure Transmitter	Meter Prover	CO						may be same as BCWIPT1 on p&id 021
BCWITI1		Temperature Indicator	Meter Prover	CO						need range
BC/WITR1		Temperature Recorder	Meter Prover	CO						need range
BC/WITT1		Temperature Transmitter	Meter Prover	CO						p&id has a tt1 and a ti1 which are on this list
WILAH1	LAH1	Level Alarm, H	Oil Sump SJT-S3	OW						need range
WTLS1		Level Switch	Oil Sump SJT-S3	OW						need setpoint
WAT1S1		Oil Slick Monitor	Retention Pond Entrance Oil Slick Monitor	WW						need setpoint
SJT45PR1		Pressure Recorder	Site							not found on p&id
TRREC		Temperature Recorder	Site					0-400	PSIG	not found on p&id
SJT1LA1		Seal Leak Alarm	SJT-1 CO Booster Pump	CO						not found on p&id
SJT1LS1		Seal Leak Detector	SJT-1 CO Booster Pump	CO						need setpoint
SJT1TE1		Temperature Element	SJT-1 CO Booster Pump Bottom Motor Bearings	CO						need setpoint
										need range

ELN	ELN ON P&ID	DEVICE	LOCATION	SERVICE	DATEC LIST SETPOINT	DATEC LIST RANGE	BASELINE SETPOINT	BASELINE RANGE	UNITS	COMMENTS
SJT1PA2	SJT1PAH2	Pressure Alarm	SJT-1 CO Booster Pump High Case Pressure	CO			120			
SJT1PS2		Pressure Switch	SJT-1 CO Booster Pump High Case Pressure	CO	120	0-300	120	0-300	PSIG	
SJT1PA1	SJT1PAL1	Pressure Alarm	SJT-1 CO Booster Pump Low Suction Pressure	CO			0		PSIG	
SJT1PS1		Pressure Switch	SJT-1 CO Booster Pump Low Suction Pressure	CO	0	30"HG-20psig	0	30"HG-20psig	"HG/PSIG	
SJT1TA1		Temperature Alarm	SJT-1 CO Booster Pump Motor Winding Temp.	CO						need setpoint
SJT1TE3		Temperature Element	SJT-1 CO Booster Pump Thrust Bearings	CO						need range
SJT1TE2		Temperature Element	SJT-1 CO Booster Pump Top Motor Bearings	CO						need range
SJT1NA1		Vibration Alarm	SJT-1 CO Booster Pump Vibration	CO						need setpoint
SJT1NS1		Vibration Switch	SJT-1 CO Booster Pump Vibration	CO						need range
SJT1FA1	SJT-1FAL1	Flow Alarm	SJT-1 CO Booster Pump, Low Discharge Flow	CO			500, 15sec		gpm	
SJT1FS1		Flow Switch	SJT-1 CO Booster Pump, Low Discharge Flow	CO			500	740-860	gpm	
SJT1TIA1		Temperature Monitor	SJT-1 CO Booster Pump/Motor Bearings	CO		0-250		0-250	degrees F	
SJT2FA1	SJT-2FAL1	Flow Alarm	SJT-2 CO Booster Pump, Low Discharge Flow	CO			500, 15sec		gpm	
SJT2LA1		Seal Leak Alarm	SJT-2 CO Booster Pump	CO						need setpoint
SJT2LS1		Seal Leak Detector	SJT-2 CO Booster Pump	CO						need setpoint
SJT2TE1		Temperature Element	SJT-2 CO Booster Pump Bottom Motor Bearings	CO						need range
SJT2PA2	SJT2PAH2	Pressure Alarm	SJT-2 CO Booster Pump High Case Pressure	CO						need setpoint
SJT2PA1	SJT2PAL1	Pressure Alarm	SJT-2 CO Booster Pump Low Suction Pressure	CO						need setpoint
SJT2PS1		Pressure Switch	SJT-2 CO Booster Pump Low Suction Pressure	CO	0	30"HG-20psig	0	30"HG-20psig	"HG/PSIG	
SJT2TA1		Temperature Alarm	SJT-2 CO Booster Pump Motor Winding Temp.	CO						need setpoint
SJT2TE3		Temperature Element	SJT-2 CO Booster Pump Thrust Bearings	CO						need range
SJT2TE2		Temperature Element	SJT-2 CO Booster Pump Top Motor Bearings	CO						need range
SJT2NA1		Vibration Alarm	SJT-2 CO Booster Pump Vibration	CO						need setpoint
SJT2NS1		Vibration Switch	SJT-2 CO Booster Pump Vibration	CO						need range
SJT2FS1		Flow Switch	SJT-2 CO Booster Pump, Low Discharge Flow	CO			500	740-860	gpm	
SJT2TIA1		Temperature Monitor	SJT-2 CO Booster Pump/Motor Bearings	CO		0-250		0-250	degrees F	
SJT3FA1	SJT-3FAL1	Flow Alarm	SJT-3 CO Booster Pump, Low Discharge Flow	CO			500, 15sec		gpm	
SJT3LA1		Seal Leak Alarm	SJT-3 CO Booster Pump	CO						need setpoint
SJT3LS1		Seal Leak Detector	SJT-3 CO Booster Pump	CO						need setpoint
SJT3TE1		Temperature Element	SJT-3 CO Booster Pump Bottom Motor Bearings	CO						need range
SJT3PA2	SJT3PAH2	Pressure Alarm	SJT-3 CO Booster Pump High Case Pressure	CO						need setpoint
SJT3PA1	SJT3PAL1	Pressure Alarm	SJT-3 CO Booster Pump Low Suction Pressure	CO						need setpoint
SJT3PS1		Pressure Switch	SJT-3 CO Booster Pump Low Suction Pressure	CO	0	30"HG-20psig	0	30"HG-20psig	"HG/PSIG	
SJT3TA1		Temperature Alarm	SJT-3 CO Booster Pump Motor Winding Temp.	CO						need setpoint
SJT3TE3		Temperature Element	SJT-3 CO Booster Pump Thrust Bearings	CO						need range
SJT3TE2		Temperature Element	SJT-3 CO Booster Pump Top Motor Bearings	CO						need range
SJT3NA1		Vibration Alarm	SJT-3 CO Booster Pump Vibration	CO						need setpoint
SJT3NS1		Vibration Switch	SJT-3 CO Booster Pump Vibration	CO						need range
SJT3FS1		Flow Switch	SJT-3 CO Booster Pump, Low Discharge Flow	CO			500	740-860	gpm	
SJT3TIA1		Temperature Monitor	SJT-3 CO Booster Pump/Motor Bearings	CO		0-250		0-250	degrees F	
SJT4FA1	SJT-4FAL1	Flow Alarm	SJT-4 CO Booster Pump, Low Discharge Flow	CO			500, 15sec		gpm	
SJT4LA1		Seal Leak Alarm	SJT-4 CO Booster Pump	CO						need setpoint
SJT4LS1		Seal Leak Detector	SJT-4 CO Booster Pump	CO						need setpoint

ELN	ELN ON P&ID	DEVICE	LOCATION	SERVICE	DATEC LIST SETPOINT	DATEC LIST RANGE	BASELINE SETPOINT	BASELINE RANGE	UNITS	COMMENTS
SJT4TE1		Temperature Element	SJT-4 CO Booster Pump Bottom Motor Bearings	CO						need range
SJT4PA2	SJT4PAH2	Pressure Alarm	SJT-4 CO Booster Pump High Case Pressure	CO						need setpoint
SJT4PA1	SJT4PAL1	Pressure Alarm	SJT-4 CO Booster Pump Low Suction Pressure	CO						need setpoint
SJT4PS1		Pressure Switch	SJT-4 CO Booster Pump Low Suction Pressure	CO	0	30"HG-20psig	0	30"HG-20psig	"HG/PSIG	
SJT4TA1		Temperature Alarm	SJT-4 CO Booster Pump Motor Winding Temp.	CO						need setpoint
SJT4TE3		Temperature Element	SJT-4 CO Booster Pump Thrust Bearings	CO						need range
SJT4TE2		Temperature Element	SJT-4 CO Booster Pump Top Motor Bearings	CO						need range
SJT4NA1		Vibration Alarm	SJT-4 CO Booster Pump Vibration	CO						need setpoint
SJT4NS1		Vibration Switch	SJT-4 CO Booster Pump Vibration	CO						need range
SJT4FS1		Flow Switch	SJT-4 CO Booster Pump, Low Discharge Flow	CO			500	740-860	gpm	
SJT4TIA1		Temperature Monitor	SJT-4 CO Booster Pump/Motor Bearings	CO		0-250		0-250	degrees F	
SJT4PT1		Pressure Switch	SJT-4 Crude Oil Booster Pump Discharge Pressure	CO		0-300			PSIG	not found on p&id listed as a switch & X-mitt
SJT4PIC4		Pressure Controller	SJT-4 Discharge Line Control Valve	CO		0-400		0-400	PSIG	
SJT4PR1	SJT4PR4	Pressure Recorder	SJT-4 Discharge Line, D/S of control valve	CO		0-400		0-400	PSIG	
SJT4PT4		Pressure Transmitter	SJT-4 Discharge Line, D/S of control valve	CO		0-100,0-1000		0-400	PSIG	
SJT5FA1	SJT-5FAL1	Flow Alarm	SJT-5 CO Booster Pump, Low Discharge Flow	CO			500, 15sec		gpm	
SJT5LA1		Seal Leak Alarm	SJT-5 CO Booster Pump	CO						need setpoint
SJT5LS1		Seal Leak Detector	SJT-5 CO Booster Pump	CO						need setpoint
SJT5TE1		Temperature Element	SJT-5 CO Booster Pump Bottom Motor Bearings	CO						need range
SJT5PT5	SJT5PT4	Pressure Transmitter	SJT-5 CO Booster Pump Discharge, D/S of Cont. Vlv.	CO				0-400	PSIG	
SJT5PA2	SJT5PAH2	Pressure Alarm	SJT-5 CO Booster Pump High Case Pressure	CO						need setpoint
SJT5PS2		Pressure Switch	SJT-5 CO Booster Pump High Case Pressure	CO	120	0-300	120	0-300	PSIG	
SJT5PA1	SJT5PAL1	Pressure Alarm	SJT-5 CO Booster Pump Low Suction Pressure	CO						need setpoint
SJT5PS1		Pressure Switch	SJT-5 CO Booster Pump Low Suction Pressure	CO	0	30"HG-20psig	0	30"HG-20psig	"HG/PSIG	
SJT5TA1		Temperature Alarm	SJT-5 CO Booster Pump Motor Winding Temp.	CO						need setpoint
SJT5TE3		Temperature Element	SJT-5 CO Booster Pump Thrust Bearings	CO						need range
SJT5TE2		Temperature Element	SJT-5 CO Booster Pump Top Motor Bearings	CO						need range
SJT5NA1		Vibration Alarm	SJT-5 CO Booster Pump Vibration	CO						need setpoint
SJT5NS1		Vibration Switch	SJT-5 CO Booster Pump Vibration	CO						need range
SJT5FS1		Flow Switch	SJT-5 CO Booster Pump, Low Discharge Flow	CO			500	740-860	gpm	
SJT5TIA1		Temperature Monitor	SJT-5 CO Booster Pump/Motor Bearings	CO		0-250		0-250	degrees F	
SJT5PIC4		Pressure Controller	SJT-5 Discharge Line, D/S of control valve	CO		0-400		0-400	PSIG	
SJT5PR1	SJT5PR4	Pressure Recorder	SJT-5 Discharge Line, D/S of control valve	CO		0-400		0-400	PSIG	
SJT6PA1		Pressure Alarm	SJT-6 Accelerated Fill Pump	CO	25					delete per ECP SJ-M/O-4583
SJT6PA2		Pressure Alarm	SJT-6 Accelerated Fill Pump	CO						delete per ECP SJ-M/O-4583
SJT6PS1	SJT6PSL1	Pressure Switch	SJT-6 Accelerated Fill Pump	CO	25	0-100			PSIG	delete per ECP SJ-M/O-4583
SJT6PS2	SJT6PSH2	Pressure Switch	SJT-6 Accelerated Fill Pump	CO	800	0-1800			PSIG	delete per ECP SJ-M/O-4583
SJT6LA1	SJT6LA1A/B	Seal Leak Alarm	SJT-6 Accelerated Fill Pump	CO						delete per ECP SJ-M/O-4583
SJT6LS1	SJT6LS1A/B	Seal Leak Detector	SJT-6 Accelerated Fill Pump	CO						delete per ECP SJ-M/O-4583
SJT6NA1		Vibration Alarm	SJT-6 Accelerated Fill Pump Motor Vibration	CO						delete per ECP SJ-M/O-4583
SJT6NS1	SJT6NS5	Vibration Switch	SJT-6 Accelerated Fill Pump Motor Vibration	CO						delete per ECP SJ-M/O-4583
SJT6TA1		Temperature Alarm	SJT-6 Accelerated Fill Pump Motor Winding	CO						delete per ECP SJ-M/O-4583
SJT6NA2		Vibration Alarm	SJT-6 Accelerated Fill Pump Pump Vibration	CO						delete per ECP SJ-M/O-4583

ELN	ELN ON P&ID	DEVICE	LOCATION	SERVICE	DATEC LIST SETPOINT	DATEC LIST RANGE	BASELINE SETPOINT	BASELINE RANGE	UNITS	COMMENTS
SJT6TIA1		Temperature Monitor	SJT-6 Accelerated Fill Pump Temp. Monitor	CO		0-250		0-250	degrees F	delete per ECP SJ-M/O-4583
SJT6NS2		Vibration Switch	SJT-6 Accelerated Fill Pump Vibration	CO						delete per ECP SJ-M/O-4583
SJT6TE2		Temperature Element	SJT-6 Accelerated Fill Pump, Case	CO						delete per ECP SJ-M/O-4583
SJT6TE4		Temperature Element	SJT-6 Accelerated Fill Pump, Inboard Motor Brg.	CO						delete per ECP SJ-M/O-4583
SJT6TE3		Temperature Element	SJT-6 Accelerated Fill Pump, Inboard Pump Brg.	CO						delete per ECP SJ-M/O-4583
SJT6TE5		Temperature Element	SJT-6 Accelerated Fill Pump, Outboard Motor Brg.	CO						delete per ECP SJ-M/O-4583
SJT6TE1		Temperature Element	SJT-6 Accelerated Fill Pump, Outboard Pump Brg.	CO						delete per ECP SJ-M/O-4583
SJT7PA1		Pressure Alarm	SJT-7 Accelerated Fill Pump	CO	25					delete per ECP SJ-M/O-4583
SJT7PA2		Pressure Alarm	SJT-7 Accelerated Fill Pump	CO						delete per ECP SJ-M/O-4583
SJT7PS1	SJT7PSL1	Pressure Switch	SJT-7 Accelerated Fill Pump	CO	25	0-100				delete per ECP SJ-M/O-4583
SJT7PS2	SJT7PSH2	Pressure Switch	SJT-7 Accelerated Fill Pump	CO	800	0-1800			PSIG	delete per ECP SJ-M/O-4583
SJT7LA1	SJT7LA1A/B	Seal Leak Alarm	SJT-7 Accelerated Fill Pump	CO					PSIG	delete per ECP SJ-M/O-4583
SJT7LS1	SJT7LS1A/B	Seal Leak Detector	SJT-7 Accelerated Fill Pump	CO						delete per ECP SJ-M/O-4583
SJT7NA1		Vibration Alarm	SJT-7 Accelerated Fill Pump Motor Vibration	CO						delete per ECP SJ-M/O-4583
SJT7NS1	SJT7NS5	Vibration Switch	SJT-7 Accelerated Fill Pump Motor Vibration	CO						delete per ECP SJ-M/O-4583
SJT7TA1		Temperature Alarm	SJT-7 Accelerated Fill Pump Motor Winding	CO						delete per ECP SJ-M/O-4583
SJT7TIA1		Temperature Monitor	SJT-7 Accelerated Fill Pump Temp. Monitor	CO		0-250		0-250	degrees F	delete per ECP SJ-M/O-4583
SJT7NA2		Vibration Alarm	SJT-7 Accelerated Fill Pump Vibration	CO						delete per ECP SJ-M/O-4583
SJT7NS2		Vibration Switch	SJT-7 Accelerated Fill Pump Vibration	CO						delete per ECP SJ-M/O-4583
SJT7TE2		Temperature Element	SJT-7 Accelerated Fill Pump, Case	CO						delete per ECP SJ-M/O-4583
SJT7TE4		Temperature Element	SJT-7 Accelerated Fill Pump, Inboard Motor Brg.	CO						delete per ECP SJ-M/O-4583
SJT7TE3		Temperature Element	SJT-7 Accelerated Fill Pump, Inboard Pump Brg.	CO						delete per ECP SJ-M/O-4583
SJT7TE5		Temperature Element	SJT-7 Accelerated Fill Pump, Outboard Motor Brg.	CO						delete per ECP SJ-M/O-4583
SJT7TE1		Temperature Element	SJT-7 Accelerated Fill Pump, Outboard Pump Brg.	CO						delete per ECP SJ-M/O-4583
SJT8PA1		Pressure Alarm	SJT-8 Accelerated Fill Pump	CO	25					delete per ECP SJ-M/O-4583
SJT8PA2		Pressure Alarm	SJT-8 Accelerated Fill Pump	CO						delete per ECP SJ-M/O-4583
SJT8PS1	SJT8PSL1	Pressure Switch	SJT-8 Accelerated Fill Pump	CO	25	0-100				delete per ECP SJ-M/O-4583
SJT8PS2	SJT8PSH2	Pressure Switch	SJT-8 Accelerated Fill Pump	CO	800	0-1800			PSIG	delete per ECP SJ-M/O-4583
SJT8LA1	SJT8LA1A/B	Seal Leak Alarm	SJT-8 Accelerated Fill Pump	CO					PSIG	delete per ECP SJ-M/O-4583
SJT8LS1	SJT8LS1A/B	Seal Leak Detector	SJT-8 Accelerated Fill Pump	CO						delete per ECP SJ-M/O-4583
SJT8NA1		Vibration Alarm	SJT-8 Accelerated Fill Pump Motor Vibration	CO						delete per ECP SJ-M/O-4583
SJT8NS1	SJT8NS5	Vibration Switch	SJT-8 Accelerated Fill Pump Motor Vibration	CO						delete per ECP SJ-M/O-4583
SJT8TA1		Temperature Alarm	SJT-8 Accelerated Fill Pump Motor Winding	CO						delete per ECP SJ-M/O-4583
SJT8TIA1		Temperature Monitor	SJT-8 Accelerated Fill Pump Temp. Monitor	CO		0-250		0-250	degrees F	delete per ECP SJ-M/O-4583
SJT8NA2		Vibration Alarm	SJT-8 Accelerated Fill Pump Vibration	CO						delete per ECP SJ-M/O-4583
SJT8NS2		Vibration Switch	SJT-8 Accelerated Fill Pump Vibration	CO						delete per ECP SJ-M/O-4583
SJT8TE2		Temperature Element	SJT-8 Accelerated Fill Pump, Case	CO						delete per ECP SJ-M/O-4583
SJT8TE4		Temperature Element	SJT-8 Accelerated Fill Pump, Inboard Motor Brg.	CO						delete per ECP SJ-M/O-4583
SJT8TE3		Temperature Element	SJT-8 Accelerated Fill Pump, Inboard Pump Brg.	CO						delete per ECP SJ-M/O-4583
SJT8TE5		Temperature Element	SJT-8 Accelerated Fill Pump, Outboard Motor Brg.	CO						delete per ECP SJ-M/O-4583
SJT8TE1		Temperature Element	SJT-8 Accelerated Fill Pump, Outboard Pump Brg.	CO						delete per ECP SJ-M/O-4583
SJT2PS2		Pressure Switch	SJT2 Crude Oil Booster Pump High Case Pressure	CO		0-300		0-300	PSIG	
SJT2PS1		Pressure Switch	SJT2 Crude Oil Booster Pump Low Suction Pressure	CO		30"HG-20psig		30"HG-20psig	"HG/PSIG	

ELN	ELN ON P&ID	DEVICE	LOCATION	SERVICE	DATEC LIST SETPOINT	DATEC LIST RANGE	BASELINE SETPOINT	BASELINE RANGE	UNITS	COMMENTS
SJT3PS2		Pressure Switch	SJT3 Crude Oil Booster Pump High Case Pressure	CO		0-300		0-300	PSIG	
SJT3PS1		Pressure Switch	SJT3 Crude Oil Booster Pump Low Suction Pressure	CO		30"HG-20psig		30"HG-20psig	PSIG	
SJT4PS2		Pressure Switch	SJT4 Crude Oil Booster Pump High Case Pressure	CO		0-300		0-300	PSIG	
SJT4PS1		Pressure Switch	SJT4 Crude Oil Booster Pump Low Suction Pressure	CO		30"HG-20psig		30"HG-20psig	"HG/PSIG	
SJT5PS2		Pressure Switch	SJT5 Crude Oil Booster Pump High Case Pressure	CO		0-300		0-300	PSIG	
SJT5PS1		Pressure Switch	SJT5 Crude Oil Booster Pump Low Suction Pressure	CO		30HG-20		30HG-20	"HG/PSIG	
SJTP101FS1	FSLL 2012	Flow Switch	SJTP-101, Tank 1 Stripper Pump	CO						need setpoint
SJTP102FS1	FSLL 2013	Flow Switch	SJTP-102, Tank 2 Stripper Pump	CO						need setpoint
SJTP103FS1	FSLL 2014	Flow Switch	SJTP-103, Tank 3 Stripper Pump	CO						need setpoint
SJTP104FS1	FSLL 2015	Flow Switch	SJTP-104, Tank 4 Stripper Pump	CO						need setpoint
SJTP105FS1	FSLL 2016	Flow Switch	SJTP-105, Tank 5 Stripper Pump	CO						need setpoint
SJTP106FS1	FSLL 2019	Flow Switch	SJTP-106, Tank 6 Stripper Pump	CO						need setpoint
WILAH3	LAH3	Level Alarm, H	Skimmer Sump SJT-S4	WW						need setpoint
WTLS3		Level Switch	Skimmer Sump SJT-S4	WW						need setpoint
T1LAH1		Level Alarm, H	Tank 1	CO						need setpoint
T1LAHH1		Level Alarm, HH	Tank 1	CO						need setpoint
T1LAL1		Level Alarm, L	Tank 1	CO						need setpoint
T1LIA1		Level Indicating Alarm	Tank 1	CO						need setpoint
T1LITS1	T1LIT1	Level Transmitter	Tank 1	CO						needs range/setpoint
T1TE1		Temperature Element	Tank 1	CO						need range
T1TI1		Temperature Indicator	Tank 1	CO		30-130		30-130	degrees F	
T1TT1		Temperature Transmitter	Tank 1	CO						p&id shows TE not TT, need range
T1LSHH	LSHH/LAHH 2(	Level Switch, HH	Tank 1 Crude Oil Level, High High	CO						need setpoint
T10LAH1		Level Alarm, H	Tank 10 Sump CO Level High	SO						need setpoint
T10LS1		Level Switch	Tank 10 Sump CO Level High	SO						need setpoint
T10LAHH1		Level Alarm, HH	Tank 10 Sump CO Level High-High	SO				0-11'-0"	feet	
T2LAH1		Level Alarm, H	Tank 2	CO						need setpoint
T2LAHH1		Level Alarm, HH	Tank 2	CO						need setpoint
T2LAL1		Level Alarm, L	Tank 2	CO						need setpoint
T2LIA1		Level Indicating Alarm	Tank 2	CO						need setpoint
T2LITS1	T2LIT1	Level Transmitter	Tank 2	CO						needs range/setpoint
T2TE1		Temperature Element	Tank 2	CO						need range
T2TI1		Temperature Indicator	Tank 2	CO		30-130		30-130	degrees F	
T2TT1		Temperature Transmitter	Tank 2	CO						p&id shows TE not TT, need range
T2LSHH	LSHH/LAHH 2(	Level Switch, HH	Tank 2 Crude Oil Level, High High	CO						need setpoint
T3LAH1		Level Alarm, H	Tank 3	CO						need setpoint
T3LAHH1		Level Alarm, HH	Tank 3	CO						need setpoint
T3LAL1		Level Alarm, L	Tank 3	CO						need setpoint
T3LIA1		Level Indicating Alarm	Tank 3	CO						need setpoint
T3LITS1	T3LIT1	Level Transmitter	Tank 3	CO						needs range/setpoint
T3TE1		Temperature Element	Tank 3	CO						need range
T3TI1		Temperature Indicator	Tank 3	CO		30-130		30-130	degrees F	
T3TT1		Temperature Transmitter	Tank 3	CO						p&id shows TE not TT, need range

ELN	ELN ON P&ID	DEVICE	LOCATION	SERVICE	DATEC LIST SETPOINT	DATEC LIST RANGE	BASELINE SETPOINT	BASELINE RANGE	UNITS	COMMENTS
T3LSHH	LSHH/LAHH 2(	Level Switch, HH	Tank 3 Crude Oil Level, High High	CO						need setpoint
T4LAH1		Level Alarm, H	Tank 4	CO						need setpoint
T4LAHH1		Level Alarm, HH	Tank 4	CO						need setpoint
T4LAL1		Level Alarm, L	Tank 4	CO						need setpoint
T4LIA1		Level Indicating Alarm	Tank 4	CO						needs range/setpoint
T4LITS1	T4LIT1	Level Transmitter	Tank 4	CO						need range
T4TE1		Temperature Element	Tank 4	CO						need range
T4TI1		Temperature Indicator	Tank 4	CO		30-130		30-130	degrees F	
T4TT1		Temperature Transmitter	Tank 4	CO						p&id shows TE not TT, need range
T4LSHH	LSHH/LAHH 2(	Level Switch, HH	Tank 4 Crude Oil Level, High High	CO						need setpoint
T5LAH1		Level Alarm, H	Tank 5	CO						need setpoint
T5LAHH1		Level Alarm, HH	Tank 5	CO						need setpoint
T5LAL1		Level Alarm, L	Tank 5	CO						need setpoint
T5LIA1		Level Indicating Alarm	Tank 5	CO						needs range/setpoint
T5LITS1	T5LIT1	Level Transmitter	Tank 5	CO						need range
T5TE1		Temperature Element	Tank 5	CO						need range
T5TI1		Temperature Indicator	Tank 5	CO		30-130		30-130	degrees F	
T5TT1		Temperature Transmitter	Tank 5	CO						p&id shows TE not TT, need range
T5LSHH	LSHH/LAHH 2(	Level Switch, HH	Tank 5 Crude Oil Level, High High	CO						need setpoint
T6LAH1		Level Alarm, H	Tank 6	CO						need setpoint
T6LAHH1		Level Alarm, HH	Tank 6	CO						need setpoint
T6LAL1		Level Alarm, L	Tank 6	CO						need setpoint
T6LIA1		Level Indicating Alarm	Tank 6	CO						needs range/setpoint
T6LITS1	T6LIT1	Level Transmitter	Tank 6	CO						need range
T6TE1		Temperature Element	Tank 6	CO						need range
T6TI1		Temperature Indicator	Tank 6	CO		30-130		30-130	degrees F	
T6TT1		Temperature Transmitter	Tank 6	CO						p&id shows TE not TT, need range
T6LSHH	LSHH/LAHH 2(	Level Switch, HH	Tank 6 Crude Oil Level, High High	CO						need setpoint
T7LAH1		Level Alarm, H	Tank 7 Sump	SO						need setpoint
T7LAHH1		Level Alarm, HH	Tank 7 Sump	SO						need setpoint
T7LS1		Level Switch	Tank 7 Sump Crude Oil Level High	SO						need setpoint
T8LAH1		Level Alarm, H	Tank 8 Sump	SO				0-11'-0"	feet	
T8LAHH1		Level Alarm, HH	Tank 8 Sump	SO						need setpoint
T8LS1		Level Switch	Tank 8 Sump Crude Oil Level High	SO						need setpoint
PT		Pressure Transmitter	Unknown					0-11'-0"	feet	
T11TI1		Temperature Indicator	Unknown							not found on p&id
TI		Temperature Indicator	Unknown			30-130			degrees F	not found on p&id
SJT123VR1		Vibration Recorder	Vibration Recorder							not found on p&id
SJT45VR1		Vibration Recorder	Vibration Recorder							not found on p&id
FSH/A	FSH 1203	Flow Switch, High	Weeks Island Header Surge Relief Valve	CO						not found on p&id
FSH/A	FSH 2203	Flow Switch, High	Weeks Island Header Surge Relief Valve	CO						need setpoint
FSH/A	FSH 3203	Flow Switch, High	Weeks Island Header Surge Relief Valve	CO						need setpoint
WIDR1		Density Recorder	WI Control Valve WI120C	CO		20-60		20-60	deg API	need setpoint

ELN	ELN ON P&ID	DEVICE	LOCATION	SERVICE	DATEC LIST SETPOINT	DATEC LIST RANGE	BASELINE SETPOINT	BASELINE RANGE	UNITS	COMMENTS
WIDT1		Density Transmitter	WI Control Valve WI120C	CO		60-20		60-20	deg API	
WIPIC1		Pressure Controller	WI Control Valve WI120C	CO		0-600		0-600	PSIG	
WIPR1		Pressure Recorder	WI Control Valve WI120C	CO		0-600		0-600	PSIG	
WIPT1		Pressure Transmitter	WI Control Valve WI120C	CO		0-100,0-1000		0-600	PSIG	
WIDPA1	WIPDAH1	Differential Pressure Alarm	WI Meter Run 1	CO						needs range/setpoint
WIDPIS1	WIPDIS1	Differential Pressure Switch	WI Meter Run 1	CO						needs range/setpoint
WIFA1		Flow Alarm	WI Meter Run 1	CO						needs setpoint
WIFIC1		Flow Controller	WI Meter Run 1	CO						needs range
WIFQI1	WIFE/FT/FQ1	Flow Transmitter	WI Meter Run 1	CO						need range
PT	PT 2479	Pressure Transmitter	WI Meter Run 1	CO						need range
WITE1	WITT1	Temperature Element	WI Meter Run 1	CO						need range
WITI1		Temperature Indicator	WI Meter Run 1	CO						needs range/setpoint
WIDPA2	WIPDAH2	Differential Pressure Alarm	WI Meter Run 2	CO						needs range/setpoint
WIDPIS2	WIPDIS2	Differential Pressure Switch	WI Meter Run 2	CO						needs setpoint
WIFA2		Flow Alarm	WI Meter Run 2	CO						needs range
WIFIC2		Flow Controller	WI Meter Run 2	CO						need range
WIFQI2	WIFE/FT/FQ2	Flow Transmitter	WI Meter Run 2	CO						need range
PT	PT 2480	Pressure Transmitter	WI Meter Run 2	CO						need range
WITE2	WITT2	Temperature Element	WI Meter Run 2	CO						needs range/setpoint
WITI2		Temperature Indicator	WI Meter Run 2	CO						needs range/setpoint
WIDPA3	WIPDAH3	Differential Pressure Alarm	WI Meter Run 3	CO						needs setpoint
WIDPIS3	WIPDIS3	Differential Pressure Switch	WI Meter Run 3	CO						needs range
WIFA3		Flow Alarm	WI Meter Run 3	CO						need range
WIFIC3		Flow Controller	WI Meter Run 3	CO						need range
WIFQI3	WIFE/FT/FQ3	Flow Transmitter	WI Meter Run 3	CO						need range
PT	PT 2481	Pressure Transmitter	WI Meter Run 3	CO						needs range/setpoint
WITE3	WITT3	Temperature Element	WI Meter Run 3	CO						needs range/setpoint
WITI3		Temperature Indicator	WI Meter Run 3	CO						needs setpoint
PT	PT/PR 2001	Pressure Transmitter	WI Pig Trap Inlet	CO						needs range
T11LAH1		Level Alarm, H								need range
T11LAL1		Level Alarm, L								need range
T11LSL1		Level Curr Switch								need range
T11LR1		Level Recorder								not found on p&id
T11LIT1		Level Transmitter				2%-30%				not found on p&id
WTAIS1		Oil Slick Monitor				0-250"				not found on p&id
WTARS2		Oil Slick Monitor				0"-250"			H20	not found on p&id
D1D2PR2		Pressure Recorder				4-12'-0"			H20	not found on p&id
SJT5PT5		Pressure Transmitter				4-12'-0"				not found on p&id
WTARS2A		Remote Read Out								not found on p&id
BC/WISGR1		Spec Gravity Recorder				0-100,0-1000				the list and p&id shows a D2PR1
BC/WISGT1		Spec Gravity Transmitter				4-12'-0"				not found on p&id
										not found on p&id
										not found on p&id
										not found on p&id
										not found on p&id