8-30-24

Answers to Bidder Questions:

CONFIRM REVISED BID DUE DATE. SEPTEMBER 12, 2024 AT 2:00 PM

New Recovery Well Design Posted 8-30-24

Confirm all steel materials are to be made in the USA. There is no requirement for steel materials to be made in the USA.

Confirm each option casing, sounder tube, gravel tube ID.

Gravel feed tube: 3.5" OD, 3.026"ID, 0.237: wall thickness Sounding tube: 2.375" OD, 2.067"ID, 0.154" wall thickness

Source: Roscoe Moss Company

Confirm Bid Bond is to be for the total of one well price. *Bid bond to be provided for one 1,000'* 24" well.

Confirm borehole size for each casing option size.

20" OD casing - 30" borehole - 36" OD conductor casing - 48" conductor borehole

24" OD casing – 34" borehole – 42" OD conductor casing – 48" conductor borehole

Sounds panels are mentioned in the technical specifications but there is no line item in the bid schedule, please add. *Will add line item in the bid schedule*.

Sounder tube is mentioned in the technical specifications but there is no line item in the bid schedule, please add. *Will add line item in the bid schedule.*

Please specify site size allowed for drilling operations for each well site. See (Well 65 and Kingery site exhibit) (Well 64 site exhibit)

Confirm the airlift and pump development water can be discharged onsite or near each site and is not required to be stored and hauled off. Airlift and pump development water will not be required to be stored and hauled off site.

Confirm the drill cuttings and drilling mud can be discharged and spread on the Kingery site and not stored and disposed of off-site from all the well sites. **Drill cuttings and drilling mud** <u>can</u> <u>be</u> <u>discharged and spread on the Kingery site and not stored and disposed of offsite from all the well sites.</u>

- **1. Scope of Work**. The contractor will perform the following tasks in compliance with the Technical Specifications and funding agency requirements:
 - **1.1.** Drilling Operations for the described three wells.
 - **1.1.1.** Mobilize all necessary equipment and personnel to the site.
 - **1.1.2.** Drill, Develop, and Test three wells to the specified depths, ensuring adherence to the approved designs and Technical Specifications.
 - **1.1.3.** Install casing and screens as per the design specifications.

Description Wells	Qty	Cost	Total (\$)
55-620349 (Kingery), 55-607244 (RID 66)			

WELL - 700' x 24"	LCS (Figure 6)		
Mobilization & Demobilization	1		
Surface Casing Construction	1		
Drill Minimum 17.5" Pilot Borehole	700 ft		
Pilot Hole Geophysical Logging	1		
Ream Pilot Hole – 34-inches	700 ft		
Reamed Pilot Hole Geophysical Logging	1		
Furnish and Install 24" LCS Blank Steel Well	150 ft		
Casing			
Furnish and Install 24" LCS Mill Slotted Well	550 ft		
Casing			
F & I 3.5" ID Schedule 40 ASTM A-53 Grade B	105 ft		
Steel Gravel Tube			
Furnish and Install Tacna 6 x 16 Gravel Pack	94.9 Tons		
Disinfection Solution	17 gallons		
Furnish and Install Annular Seal			
Neat cement seal	8.2 cu yds		
Bentonite seal	63.3 cu ft		
Transition sand seal	3,163 lbs		
Development by Swabbing and Airlifting	50 hours		
F & I Dispersant	28 gallons		
Dry swab to Agitate	24 hours		
Furnish, install, and remove test pump	1		
Development by Pumping and Surging	120 hours		
Conduct 12-Hour Step Test and 120-Hour	132 hours		
Constant Rate Pumping Test			
Discharge set-up for Step-Drawdown and	1		
Constant Rate Pumping Test Water			
Plumbness and Alignment Test and Gyroscopic	1		
Survey			
As-Built Video Log	1		
Disinfect Well, Furnish and Install Temporary	1		
Сар			
Provide Sound Barriers per Specifications	300		
Provide Sounding Tube per Specifications (125	1		
ft blank, 375 ft slotted)			
		Total:	

Description Wells 55-607245 (RID 65), 55-607247 (RID 63)	Qty	Cost	Total (\$)
WELL 800' X 24"	LCS (Figure 5)		
Mobilization & Demobilization	1		
Surface Casing Construction	1		
Drill Minimum 17.5" Pilot Borehole	800 ft		
Pilot Hole Geophysical Logging	1		
Ream Pilot Hole – 34-inches	800 ft		
Reamed Pilot Hole Geophysical Logging	1		

Furnish and Install 24" LCS Blank Steel Well	150 ft	
Casing		
Furnish and Install 24" LCS Mill Slotted Well	650 ft	
Casing		
F & I 3.5" ID Schedule 40 ASTM A-53 Grade B	105 ft	
Steel Gravel Tube		
Furnish and Install Tacna 6 x 16 Gravel Pack	110.7 Tons	
Disinfection solution	20 gallons	
Furnish and Install Annular Seal		
Neat cement seal	8.2 cu yds	
Bentonite seal	63.3 cu ft	
Transition sand seal	3,163 lbs	
Development by Swabbing and Airlifting	58 hours	
F & I Dispersant	33 gallons	
Dry swab to Agitate	24 hours	
Furnish, install, and remove test pump	1	
Development by Pumping and Surging	140 hours	
Discharge set-up for Step-Drawdown and	132 hours	
Constant Rate Pumping Test Water		
Discharge for Step-Drawdown and Constant Rate	1	
Pumping Test Water		
Plumbness and Alignment Test and Gyroscopic	1	
Survey		
As-Built Video Log	1	
Disinfect Well, Furnish and Install Temporary	1	
Cap		
Provide Sound Barriers per Specifications	300	
Provide Sounding Tube per Specifications (125 ft	1	
blank, 475 ft slotted)		
	Tota	d:

Description Well 55-607246 (RID 64)	Qty	Cost	Total (\$)
WELL 1000' x 24'	LCS (Figure 4)		
Mobilization & Demobilization	1		
Surface Casing Construction	1		
Drill Minimum 17.5" Pilot Borehole	1000 ft		
Pilot Hole Geophysical Logging	1		
Ream Pilot Hole – 34-inches	1000 ft		
Reamed Pilot Hole Geophysical Logging	1		
Furnish and Install 24" LCS Blank Steel Well	150 ft		
Casing			

Furnish and Install 24" LCS Mill Slotted Well	850 ft		
Casing			
F & I 3.5" ID Schedule 40 ASTM A-53 Grade B	105 ft		
Steel Gravel Tube			
Furnish and Install Tacna 6 x 16 Gravel Pack	142.3 Tons		
Disinfection solution	25 gallons		
Furnish and Install Annular Seal			
Neat cement seal	8.2 cu yds		
Bentonite seal	63.3 cu ft		
Transition sand seal	3,163 lbs		
Development by Swabbing and Airlifting	75 hours		
F & I Dispersant	42 gallons		
Dry swab to Agitate	24 hours		
Furnish, install, and remove test pump	1		
Development by Pumping and Surging	180 hours		
Discharge set-up for Step-Drawdown and	132 hours		
Constant Rate Pumping Test Water			
Discharge for Step-Drawdown and Constant Rate	1		
Pumping Test Water			
Plumbness and Alignment Test and Gyroscopic	1		
Survey			
As-Built Video Log	1		
Disinfect Well, Furnish and Install Temporary Cap	1		
Provide Sound Barriers per Specifications	300		
Provide Sounding Tube per Specifications (125 ft	1		
blank, 675 ft slotted)			
		T	
		Total:	

Description Wells	Qty	Cost	Total (\$)		
WELL - 700' x 20" LCS (Figure 3)					
Mobilization & Demobilization	1				
Surface Casing Construction	1				
Drill Minimum 17.5" Pilot Borehole	700				
Pilot Hole Geophysical Logging	1				
Ream Pilot Hole – 30-inches	700				
Reamed Pilot Hole Geophysical Logging	1				

Furnish and Install 20" LCS Blank Steel Well	150 ft		
Casing			
Furnish and Install 20" LCS Mill Slotted Well	550 ft		
Casing			
F & I 3.5" ID Schedule 40 ASTM A-53 Grade B	105 ft		
Steel Gravel Tube			
Furnish and Install Tacna 6 x 16 Gravel Pack	81.8 tons		
Disinfection (lump sum)	15 gallons		
Furnish and Install Annular Seal			
Neat cement seal	7.1 cu yds		
Bentonite seal	54.4 cu ft		
Transition sand seal	2,727 lbs		
Development by Swabbing and Airlifting	50 hours		
F & I dispersant	20 gallons		
Dry swab to Agitate	24 hours		
Furnish, install, and remove test pump	1		
Development by Pumping and Surging	120		
Conduct 12-Hour Step Test and 120-Hour Constant	132		
Rate Pumping Test			
Discharge for Step-Drawdown and Constant Rate	1		
Pumping Test Water			
Plumbness and Alignment Test and Gyroscopic	1		
Survey			
As-Built Video Log	1		
Disinfect Well, Furnish and Install Temporary Cap	1		
Provide Sound Barriers per Specifications	300		
Provide Sounding Tube per Specifications (125 ft	1		_
blank, 675 ft slotted)			
		Total:	

Description Wells	Qty	Cost	Total (\$)
WELL - 800' x 20" L	CS (Figure 2)		
Mobilization & Demobilization	1		
Surface Casing Construction	1		
Drill Minimum 17.5" Pilot Borehole	800		
Pilot Hole Geophysical Logging	1		
Ream Pilot Hole – 30-inches	800		
Reamed Pilot Hole Geophysical Logging	1		

Furnish and Install 20" LCS Blank Steel Well	150 ft		
Casing			
Furnish and Install 20" LCS Mill Slotted Well	650 ft		
Casing			
F & I 3.5" ID Schedule 40 ASTM A-53 Grade B	105 ft		
Steel Gravel Tube			
Furnish and Install Tacna 6 x 16 Gravel Pack	95.4 tons		
Disinfection (lump sum)	22 gallons		
Furnish and Install Annular Seal			
Neat cement seal	7.1 cu yds		
Bentonite seal	54.4 cu ft		
Transition sand seal	2,727 lbs		
Development by Swabbing and Airlifting	58 hours		
F & I dispersant	23 gallons		
Dry swab to Agitate	24 hours		
Furnish, install, and remove test pump	1		
Development by Pumping and Surging	140		
Conduct 12-Hour Step Test and 120-Hour Constant	132		
Rate Pumping Test			
Discharge for Step-Drawdown and Constant Rate	1		
Pumping Test Water			
Plumbness and Alignment Test and Gyroscopic	1		
Survey			
As-Built Video Log	1		
Disinfect Well, Furnish and Install Temporary Cap	1		
Provide Sound Barriers per Specifications	300		
Provide Sounding Tube per Specifications (125 ft	1		
blank, 675 ft slotted)			
		Total:	

Description Wells 55-620349 (Kingery), 55-	Qty	Cost	Total (\$)
607244 (RID 66)			
WELL - 1,000' x 20"	LCS (Figure 1)		
Mobilization & Demobilization	1		
Surface Casing Construction	1		
Drill Minimum 17.5" Pilot Borehole	1,000		
Pilot Hole Geophysical Logging	1		
Ream Pilot Hole – 30-inches	1,000		

Reamed Pilot Hole Geophysical Logging	1		
Furnish and Install 20" LCS Blank Steel Well	150 ft		
Casing			
Furnish and Install 20" LCS Mill Slotted Well	850 ft		
Casing			
F & I 3.5" ID Schedule 40 ASTM A-53 Grade B	105 ft		
Steel Gravel Tube			
Furnish and Install Tacna 6 x 16 Gravel Pack	122.7 tons		
Disinfection (lump sum)	22 gallons		
Furnish and Install Annular Seal			
Neat cement seal	7.1 cu yds		
Bentonite seal	54.4 cu ft		
Transition sand seal	2,727 lbs		
Development by Swabbing and Airlifting	75 hours		
F & I dispersant	29 gallons		
Dry swab to Agitate	24 hours		
Furnish, install, and remove test pump	1		
Development by Pumping and Surging	180		
Conduct 12-Hour Step Test and 120-Hour	132		
Constant Rate Pumping Test			
Discharge for Step-Drawdown and Constant Rate	1		
Pumping Test Water			
Plumbness and Alignment Test and Gyroscopic	1		
Survey			
As-Built Video Log	1		
Disinfect Well, Furnish and Install Temporary	1		
Cap			
Provide Sound Barriers per Specifications	300		
Provide Sounding Tube per Specifications (125 ft	1		
blank, 675 ft slotted)			
		Total:	

- **1.2.** Drilling Operations for the described two optional wells.
 - **1.2.1.** Mobilize all necessary equipment and personnel to the site.
 - **1.2.2.** Drill, Develop, and Test up to two new wells to the specified depths, ensuring adherence to the approved designs.
 - **1.2.3.** Install casing and screens as per the design specifications.